

PERSONAL INFORMATION **Kazuo Tanaka**



WORK
EXPERIENCE

- | | |
|--------------------|--|
| Feb 2022-present | <p>Physicist
 ELI-NP/IFIN-HH, Magurele-Bucharest, Romania</p> <ul style="list-style-type: none"> • Responsible for Supervising PhD students, advising scientists for designing experiments, bridging the collaboration among ELI-NP, Osaka Univ., and Okamoto Opt. |
| Apr 2022-present | <p>Scientific advisor
 EX-Fusion, Osaka Japan</p> <ul style="list-style-type: none"> • Advising the CEO of EX-Fusion and supporting research activities at EX-Fusion |
| Sept 2016-Jan 2022 | <p>Scientific director
 ELI-NP/IFIN-HH, Magurele-Bucharest, Romania</p> <ul style="list-style-type: none"> • Responsible for all the activities related to ELI-NP implementation, forming the user community, and collaborating with ELI-ERIC |
| Sept 2016-present | <p>Specially appointed professor
 Insti. Laser Eng., Osaka University, Osaka Japan</p> <ul style="list-style-type: none"> • Responsible for bridging the collaboration among ELI-NP, Osaka Univ. and Okamoto Opt., advising the director of ILE, Osaka U and supporting research activities at ILE |
| Apr 2012-Mar 2013 | <p>Program officer of Japan Society for Promotion of Science, Japan
 Tokyo Japan</p> <ul style="list-style-type: none"> • Evaluating research proposals for grant application |
| Apr 2011-Mar 2016 | <p>Director of Science and Engineering Library, Osaka University
 Osaka Univ. Library, Suita Osaka Japan</p> <p>Responsible for the library activity</p> |
| Apr 2011-Mar 2015 | <p>Director of Center for Nonlinear Science and Engineering, Osaka University
 Osaka University, Suita, Osaka Japan</p> |

- Responsible for inter-connecting related research groups for fund raising

Apr. 2009-Mar. 2010 Visiting professor
National Institute of Fusion Science, Toki, Aichi, Japan
• Laser fusion reactor design and experiments

Apr. 2001-Aug. 2016 Professor
Osaka University
• Laser fusion research

Apr. 1995-Mar. 1997 Visiting professor
Yokohama National University, Yokohama Japan
• Lecture for laser fusion

Apr. 1991-Mar. 2001 Associate professor
Osaka University
Laser fusion research

Apr. 1984-Mar. 1991 Assistant professor
Osaka University
Laser fusion research

Apr. 1991-Mar. 2001 Research Associate
Laboratory for Laser Energetics, University of Rochester, USA
Laser plasma interaction physics

EDUCATION AND TRAINING

1979-1982 PhD
University of Rochester, Rochester, N.Y., U.S.A
• Non-linear scattering processes of stimulated Raman and stimulated Brillouin in laser produced plasmas

1978-1979 Master
University of Rochester, Rochester, N.Y., U.S.A
• Laser plasma physics

1974-1976 Master
• Osaka University, Osaka Japan
• Electrical Engineering

1970-1974 Bachelor
• Osaka University, Osaka Japan
• Electrical Engineering

PERSONAL
SKILLS

Mother tongue(s) Japanese

Other language(s)

English	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
	C1	C1	C1	C1	C1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through my work as researcher with a long international experience

Organisational / managerial
skills

- directorship (ELI-NP, Osaka U. Library and Nonlinear center)
- advising people (scientific supervisor of PhD students and scientists)
- decision making skills
- promoting harmonious discussions for producing science outputs

Job-related skills

- ability to work under pressure
- conducting large projects

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Proficient user	Proficient user	Independent user	Proficient user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

- good command of office suite (word processor, spread sheet, presentation software)

ADDITIONAL
INFORMATION

Publications	> 300 in referred international journals
Presentations	> 40
Projects	10
Conferences	> 50
Citations	> 2000
H-index (Scopus)	48

ANNEXES

ARTICLES IN REFERED JOURNALS/BOOKS

Listed in different file

【Director of a project won (CONTRIBUTION TO PROJECTS)】

1. ELI-NP Project (2016-2022): Extreme Light Infrastructure Nuclear Physics Phase II, a project financed by the Romanian government and the European Union through the European Regional Development Fund and the Competitiveness Operational Programme (No. 1007.07.2016, COP, ID 1334) (2016-2021) The total fund has been about 400 Million Euros.
2. S level research project fund in MEXT
"Study of Fast Ignition using Super-penetration Laser Focusing" (2015-2019)
\$1.5 M
3. MEXT project fund
"Exploration of New Extreme Matter using both XFEL and Power Lasers"
(2012-2017) \$15 M
4. A level research funds in MEXT (2008-2010, 2010-2013) \$0.5M x2
5. Two B level research funds in MEXT \$0.3M
6. Experimental Activities
7. Leaders in numerous experimental campaigns conducted at GEKKO XII and PW laser facilities at Osaka University since 1985.
8. Principle Investigator on the experimental campaigns at the OMEGA laser system at the University of Rochester, N.Y., U.S.A. for fast ignition core formation studies with GA, UR collaboration since 1995.
9. Principle Investigator on the experimental campaigns at Rutherford Appleton Laboratory (UK) PW laser system with RAL collaboration since 2005.
10. Coordinator on the collaboration research with GA, UCSD, Univ of Michigan (U.S.A.), Shanghai Institute of Optics and Fine Mechanics, Science and Technical University of China, Shanghai Jiatong University (China), CEA, LULI (France), University of Oxford, Rutherford Appleton Laboratory (U.K.), Madrid Technical University (Spain), Nagoya Univ., National Institute of Fusion Science, University of Electro-communications, JAEA and Ritsumeikan University.
Jan. 22, 2018

【Member in the International Advisory Board of a scientific event 】

1. Board Member of IFSA: Inertial Fusion Science and Applications (International Conference)(2001-)
2. Board Member of Japanese Society of Plasma Science and Nuclear Fusion Research(2004-2008)
3. Board Member of Institute of Laser Technology(2000-)
Program Chair of Japanese Society of Plasma Science and Nuclear Fusion Research(2004-2006)
4. Editor in Chief at Japanese Society of Plasma Science and Nuclear Fusion Research(2006-2008)
5. Editor of Plasma Physics and Controlled Fusion (2006-)
6. Board Member of Asian Intense Laser Network (2006-)
7. Board Member of International Committee on Ultrahigh Intensity Lasers(2007-)
8. Board Member of Plasma Physics and Controlled Fusion Journal at the Institute of Physics, U.K. (2006-)

9. Deputy Chair Japanese Physics Society, Division of Plasma Physics (2007-2008)
10. Chair Japan Physical Society, Division of Plasma Physics (2008-2009)
11. Board Member of Institute of Laser Engineering (2005-2009)
12. Board Member of Institute of Laser Technology (2005-2018)
13. Board Member of Laser Society of Japan (2009-2018)
14. Representative delegate of Japan Physical Society (2011-2013)
15. AAPPS-DPP IOC (International Organizing Committee) member (2019-)
16. <https://nps.org.np/wp-content/uploads/2021/05/Preliminary-announcement-v3.pdf>
17. ICUIL (International Committee on Ultra-high Intensity Laser member (2018-)
<https://www.icuil.org/about-icuil/committee.html>

【Scientific reviewer at international journals】

Physical Review Letters, Physical Review E, Plasma Physics and Controlled Fusion, Physics of Plasmas, Review of Laser Engineering, Matter and Radiation at Extremes, Laser and Particle Beams,

【Organiser of national and international scientific events】

- 1) International Fusion Sciences and Applications (IFSA) 1999
Topical Program co-chair, Bordeaux France
- 2) Japan- U.S. Fast Ignition workshop 1999
San Diego, U.S.A.
- 3) International Fusion Sciences and Applications (IFSA) 2001
Topical Program co-chair, Kyoto Japan
- 4) International Fusion Sciences and Applications (IFSA) 2003
Organizing co-chair, Montrey U.S.A.
- 5) Fast Ignition Workshop 2004.
Co-Chair, Kyoto Japan
- 6) International Fusion Sciences and Applications (IFSA) 2005
Organizing co-chair, Biarritz France
Jan. 22, 2018
- 7) Japan- U.S. Fast Ignition workshop 2006
Co-chair, Philadelphia U.S.A.
- 8) Japan- U.S. Fast Ignition workshop 2007
Co-chair Shiga Japan
- 9) International Fusion Sciences and Applications (IFSA) 2007
Organizing Co-chair, Kobe Japan
- 10) International Fusion Sciences and Applications (IFSA) 2009
Co-chairs, San Francisco U.S.A. (Co-chairs :Dr Edward Moses, LLNL,USA
and Dr Christine Labaune, LULI France)
- 11) International Fusion Sciences and Applications (IFSA) 2011
Co-chairs, Bordeaux France
- 12) Co-chair of Japan-US fast ignition workshops (1999-2009) with Dr R Stephens (GA, USA).
- 13) Co-chair of Laser Fusion Reactor workshop at TOFE conference, Las Vegas, Oct. 2010 with Prof A. Hassanein, Purdue Univ. USA.
- 14) PLASMA CONFERENCE 2011, Vice Program Chair & organizing member, Kanazawa, Japan, Nov. 22-25,2011.
- 15) Chair of Japan Plasma Science Federation (2011-2013)
- 16) Chair of ASHULA (JSPS Asian Core Research and Education Program) Grand Seminar/Symposium 2016 (Jan. 5-7, 2016, Osaka U.).

- 17) Chair of ELISS2017 (ELI Summer School, Aug. 27-Sept.1, 2017, Cheil Gradestei, Romania)
- 18) Chair of ELI-NP International Symposium: Inaugural 10 PW Laser and Users Symposium – Extreme Light Infrastructure: Moving into Uncharted Territories, Nov. 20, 2020.
- 19) Chair of Yamanaka Award Committee, IFSA (2023-current)
- 20) Vice Chair of Mima Award Committee, AAPPs-DPP (2025-current)
- 21) Vice Chair of Inertial Fusion Energy Forum Japan (2025-current)

【Seminars at important scientific centres abroad】

Osaka University to ELI-NP,
10th KPSI Seminar, Aug. 25, 2016, KPSI, QST, Kizu Japan

Nano structured target interaction with ultra-intense laser
Darmstadt University
Se

【Other Services】

2002-2008

Key Person: Japan-China core to core university program in high energy density science (Inertial Fusion Energy)

2007-2009

Director: Japan-India two country joint project under JSPS (Japan Society of Promotion for Science)

2011-2016

Director: Asia Core University Program “ASHULA” under JSPS.

Tanaka has raised 17 PhDs in his career.

2023-Current

Coordination Key Person: MOU signed by University of Osaka, Okamoto Opt., ELI-NP in the presence of Japanese Prime J Minister Kishida and Romanian President KW Iohannis. Center for High Power Optics construction starts in 2025. Japan and Romania have signed on the Strategic Partnership Agreement by Iohannis and Kishida in 2023.

【Awards】

- 1. International Rotary Club Fellowship (1978)
- 2. APS (American Physical Society) Fellow, U.S.A. (2003)
Citation “For outstanding experimental contributions to high energy density plasma physics in the areas of laser-plasma interactions, equation of state, cryogenic implosions, and fast ignition.”
- 3. Award of Ministry of Education and Culture Japan (2005)
Citation “For original first proof of fast ignition heating scheme.”
- 4. APS Dawson Award, U.S.A.(2006)
Citation “For developing the Fast Ignition inertial fusion concept and for

demonstrating key aspects of it in a series of experiments that have catalyzed the world-wide effort on the concept."

5. Daiwa Award, U.K. (2007)

Citation "For international outstanding research on fast ignition."

6. Progress Award, Laser Society of Japan(2011)

Citation "For Advanced ultra intense laser PW laser system development."

7. Taizan Award, Inst. Laser Technology

Citation "For promoting the international relationship with Romania via. Scientific Director at ELI-NP" (2023)

MINIMAL STANDARDS

for being hired and/or awarded the professional rank of
 Leading Researcher (1st Rank Research Scientist - CS I) and Established Researcher (2nd
 Rank Research Scientist - CS II)

1. Teaching and Professional Activity

Item No	Type of Activities	Indicators	My score
1.	Books at global Web of Science recognised publishing houses as an author	$A_1 = \sum_i 4/n_i^{ef}$	
2.	Book chapters at global Web of Science recognised publishing houses as an author/Reviews in ISI-ranked journals	$A_2 = \sum_i 1/n_i^{ef}$	
3.	Books at global Web of Science recognised publishing houses as an editor	$A_3 = \sum_i 0.5/n_i^{ef}$	
4.	Books, manuals, laboratory guides at national publishing houses or other international publishing houses as an author, internal notes, presentations delivered for the approval of data analyses under large collaborations	$A_4 = \sum_i 0.5/n_i^{ef}$	
5.	Book chapters at national publishing houses or other international publishing houses as an author	$A_5 = \sum_i 0.2/n_i^{ef}$	0.4
6.	Papers in extenso (at least 3 pages) published in ISI-indexed Proceedings	$A_6 = \sum_i 0.2/n_i^{ef}$	0.57
7.	International patents awarded	$A_7 = \sum_i 3/n_i^{ef}$	
8.	National patents awarded	$A_8 = \sum_i 0.5/n_i^{ef}$	0.38
9.	Director/responsible person/coordinator for study programmes, continuing training programmes, educational projects and infrastructure projects (research projects are excluded)	$A_9 = \sum_i 0.5$	
10.	Manager/responsible person for research projects amounting to V, EUR won through national or international competition (the projects in section 9 are excluded). Amounts in RON or other currencies shall be converted to EUR at the average exchange rate of the year in question as found at www.bnr.ro for the period after 1999 and at the 1999 exchange rate for the previous period. Project responsible persons are those leading a research team, being mentioned as such in the submitted project; in their case, the amount to be taken into account is only that which relates to the team they led.	$A_{10} = \sum_i V_i/100.000$	67.2
11.	TOTAL	$A = \sum_{i=1}^{10} A_i$	68.55

n_i^{ef} = is the actual number of authors of item i and have the following values:

n_i	if $n_i \leq 5$
$(n_i + 5)/2$	if $5 < n_i \leq 15$
$(n_i + 15)/3$	if $15 < n_i \leq 75$
$(n_i + 45)/4$	if $n_i > 75$

n_i is typically the number of authors of item i . In the case of HEPP (High Energy Particle Physics) publications with a large number of authors, if the article is based on an internal note of the collaboration and the candidate is a co-author of this internal note, then n_i^{ef} can be given by the number of authors in the internal note.

"Article/Proceedings" papers can be taken into consideration in items 1.6 or 2, only once, as the candidate chooses.

Web of Science recognised publishing houses can be found on the Web of Science Publishers – Master Book List – Publishers website (<https://wokinfo.com/mbi/publishers/>).

Each candidate should create a ResearcherID account to facilitate the verification of data regarding the research activity and the activity impact recognition.

2. Research Activity

Item No	Type of Activities	Indicators	My score
1.	Original scientific articles in extenso as an author	$I = \sum_i AIS_i / n_i^{ef}$	30.85
2.	Original scientific articles in extenso as a first author or a corresponding author, according to the mentions on the article. Articles where authors are indicated in the alphabetical order of their name and the candidate is a first author exclusively due to their name and the alphabetical order shall not be taken into account. In the case of HEPP (High Energy Particle Physics) publications with a large number of authors, if the article is based on an internal note whose approval for sending to publication was upheld by the author, then the author is considered first author.	$P = \sum_i AIS_i$	20.83

AIS_i = is the absolute Article influence score of the scientific journal where article i was published, according to its year of publication as per www.eigenfactor.org/ for articles published until 2006 and Journal Citation Report (Web of Science) starting from 2007; if the publishing year cannot be found in the database, the closest year shall be chosen.

3. Activity Impact Recognition

Item No	Type of Activities	Indicators	My score
1.	Citations in scientific journals with impact factor found in InCites Journal Citation Reports or in books at Web of Science recognised publishing houses Citations originating from articles where the candidate is as an author or a co-author shall not be taken into account.	$C = \sum_i c_i/n_i^{eff}$	77.86
2.	Hirsch Index	h	48

c_i = number of citations in ISI journals of publication i

h = is defined as follows: an author has the Hirsch index h if they published h articles cited at least h times. The Hirsch index shall be calculated using the ISI Web of Science database.

1. Minimal Conditions

Item No	Category		
	Field of Activity	Conditions for Leading Researcher (CS I)	My score
1	Teaching and Professional Activity	$A \geq 2$	$A = 68.55$
2	Research Activity	$I \geq 4$	$I = 30.85$
		$P \geq 4$	$P = 20.83$
3	Activity Impact Recognition	$C \geq 40$	$C = 77.86$
		$h \geq 10$	$h = 48$
	TOTAL SCORE	$T \geq 12$	$T = 246.09$
	$T = A + P/2 + I/2 + C/20 + h/5$		

Published papers by Kazuo A Tanaka (as of Nov. 2025)

Research Paper

1. O Budriga, E d'Humieres, A Budriga, and KA Tanaka,
Reaching extreme laser intensities using multi-petawatt lasers interacting with micro-cones,
Plasma Phys. Control. Fusion, 67, 035027(9pp) (2025).
2. Takuya Mikami, Shinji Motokoshi, Kazuo A Tanaka, and Takahisa Jitsuno,
Current and future status of high repetition, high resistivity optical thin film,
Optorionics No.1, 78-83 (2025) (In Japanese)
3. F. T. T. Hough, S. Y. Hoh, I. Yusuff, K. A. Tanaka, and J. F. Ong
Gamma-ray back emission from nanowire array irradiated by ultra-intense relativistic laser pulse
AIP Advances 14, 115106 (2024); doi: 10.1063/5.0229778
4. Tomokazu Sano, Tomoki Matsuda, Akio Hirose, Mitsuru Ohata, Tomoyuki Terai, Tomoyuki Kakeshita,
Yuichi Inubushi, Takahiro Sato, Kohei Miyanishi, Makina Yabashi, et al. (31)
X-ray free electron laser observation of ultrafast lattice behaviour under femtosecond laser-driven shock
compression in iron.
Scientific reports. 2023. 13. 1. 13786-13796
5. Ludovic Rapp, Takeshi Matsuoka, Konstantin L. Firestein, Daisuke Sagae, Hideaki Habara, Keiichiro
Mukai, Kazuo A. Tanaka, Eugene Gamaly, Ryosuke Kodama, Yusuke Seto, Takahisa Shobu, Aki
Tominaga, Lachlan Smillie, Bianca Haberl, Tatiana Pikuz, Toshinori Yabuuchi, Tadashi Togashi, Yuichi
Inubushi, Makina Yabashi, Saulius Juodkazis, Dmitri V. Golberg, Andrei V. Rode & Norimasa Ozaki
Search for High-Pressure Silicon Phases: Reaching the Extreme Conditions with High-Intensity Laser
Irradiation
Springer Series in Optical Sciences. 2023. 471-494
6. JF Ong, P Ghenuche, IC Edmond Turcu, A Pukhov, and KA Tanaka,
Ultra-high-pressure generation in the relativistic transparency regime in laser-irradiated nanowire arrays,
Phys. Rev. E 107,065208 (2023)
<https://doi.org/10.1103/PhysRevE>
7. Kazuo A Tanaka, Sydney Gales, Calin A. Ur, Constantin Ivan, Ioan Dancus, Catalin Matei, Domenico
Doria, Dimiter L Balabanski, Ovidiu Tesileanu, Theodor Asavei, Septimiu Balascuta, Andre Berceanu,
Mihail Cernaianu, Catalin Chiochiu, Mihai Cuiuc, Bogdan Diaconescu, Petru Ghenuche, dan Thita, Marius
Gugiu, Florin Negoita, Jian F. Ong, Vanessa Rodrigues, Madalin Rosu, Nileta Safcas, Deepak Sangwan,
Keita Seto, Klaus Spohr, a Dan Stutman, Maria Talposi, Catalin Ticos Paolo Tomassini, Lucian Tudor,
Daniel Ursescu, and Kensuke Homma,
Status of Extreme Light Infrastructure-Nuclear Physics (Romania) (In Japanese)
Rev. Laser Engineering, 51, 299 (2023).
8. Y Hayashi, A Das, H Habara, P K Kaw, K A Tanaka
Propagation of dipole structure in an inhomogeneous-density plasma using two-dimensional particle-in-cell
simulation
Plasma Physics and Controlled Fusion. 2022. 64. 3. 035018-035018

9. Amit Lad, Y Mishima, Prashant Kumar Singh, Boyuan Li, Amitaba Adak, Gourab Chatterjee¹, P. Brijesh, Malay Dalui, M. Inoue, J. Jha, Sheroy Tata, M. Trivikram, M. Krishnamurthy, Min Chen, Z. M. Sheng, K. A. Tanaka, G. Ravindra Kumar, & H. Habara,
Relativistic, directional electron bunches from an intense laser driven grating plasma
Scientific Reports, 12:16818 (2022).
<https://doi.org/10.1038/s41598-022-21210-7>
10. K Seto, JF Ong, Y Nakamiya, M Cuciuc, MM Rosu, Rodrigues, O Tesileanu, and KA Tanaka
Experimental design of radiation reaction by 1 PW laser pulse and linear accelerator electron bunch,
High Energy Density Physics, 38, 100919 (2021).
<https://doi.org/10.1016/j.hedp.2020.100919>
11. T. Okuchi, Y Seto, N Tomioka.... K.A. Tanaka,
Ultrafast olivine-ringwoodite transformation during shock compression,
Nature Commun., 12, 4305, 2021
<http://doi.org/10.1038/s41467-021-24633-4>
12. J.F. Ong, P. Ghenuche, K.A. Tanaka,
Electron transport in a nanowire irradiated by an intense laser pulse,
Phys. Rev. Res., 3, 033262 (2021)
<https://doi.org/10.1103/PhysRevResearch.3.033262>
13. H. Habara, D. Lad, R. Nagami, P. Singh, G. Chatterjee, A. Adak, M. Dalui, J. Jha, P. Brijesh, Y. Mishima, K. Nagai, H. Sakagami, S. Tata, T. Trivikram, M. Krishnamurthy, K. A. Tanaka, G. Ravindra Kumar,
Micro-optics for ultra-intense lasers,
AIP Advances 11, 035214 (2021);
<http://doi.org/10.1063/5.0038023>
14. O. Budriga, L.E. Ionel, D. Tatomirescu, and K.A. Tanaka,
Enhancement of laser focused intensity greater than 10 times through a re-entrant cone in the petawatt regime,
Opt. Letters 45, 3454 (2020).
<https://doi.org/10.1364/OL.395316>
15. A.Das, A. Kumar, ... , K. Tanaka, G. Chatterjee, A. Lad, G. Ravindra Kumar, Predhiman Kaw,
Boundary driven unconventional mechanism of macroscopic magnetic field generation in beam-plasma interaction,
Phys. Rev. Research 2, 033405 (2020)
<https://doi.org/10.1103/PhysRevResearch.2.033405>
16. D Doria, M Cernaianu, P Ghenuche, D Stutman, KA Tanaka, C Ticos, C Ur ,
Overview of ELI-NP status and laser commissioning experiments with 1 PW and 10 PW class-lasers,
Journal of Instrumentation, Volume 15, September 2020
<http://DOI.org/10.1088/1748-0221/15/09/C09053>

17. K. A. Tanaka, K. Spohr, D. Balabanski, S. Balascuta, L. Capponi, M. Cernaianu, M. Cuciuc, A. Cucoanes, I. Dancus, A. Dhal, B. Diaconescu, D. Doria, P. Ghenuche, D. Ghita, S. Kisiov, V. Nastasa, J. Ong, F. Rotaru, D. Sangwan, P.-A. Soderstrom, D. Stutman, G. Suliman, O. Tesileanu, L. Tudor, N. Tsoneva, C. A. Ur, D. Ursescu, N. V. Zamfir,
Current status and highlights of the ELI-NP research program,
Matter Radiat. Extremes 5, 024402 (2020)
<https://doi.org/10.1063/1.5093535>
18. S. Tzenov, K. Spohr, K. Tanaka,
Dispersion properties, nonlinear waves and birefringence in classical nonlinear electrodynamics,
Journal of Physics Communications, Volume 4, Number 2, 2399, 13 February 2020;
<https://iopscience.iop.org/article/10.1088/2399-6528/ab72c7>
19. T. Gong, H. Habara, K. Sumioka, M. Yoshimoto, Y. Hayashi, S. Kawazu, T. Otsuki, T. Matsumoto, T. Minami, K. Abe, K. Aizawa, Y. Enmei, Y. Fujita, A. Ikegami, H. Makiyama, K. Okazaki, K. Okida, T. Tsukamoto, Y. Arikawa, S. Fujioka, Y. Iwasa, S. Lee, H. Nagatomo, H. Shiraga, K. Yamanoi, M. Wei, K.A. Tanaka,
Direct observation of imploded core heating via fast electrons with super-penetration scheme,
Nature Communications, (2019) 10:5614
<https://doi.org/10.1038/s41467-019-135>
20. T. Asavei, M. Bobeica, V. Nastasa, G. Manda, F. Naftanaila, F. Bratu, D. Mischianu, M. Cernaianu, P. Ghenuche, D. Savu, D. Stutman, K.A. Tanaka, M. Radu, D. Doria, P. R. Vasos,
Laser-driven radiation: Biomarkers for molecular imaging of high dose-rate effect,
Medical Physics Volume46, Issue10:E726-e734 (2019)
<https://doi.org/10.1002/mp.13741>
21. K. Ueda, K. Tanaka, et al.,
Roadmap on photonic, electronic and atomic collision physics: I. Light-matter interaction,
Journal of Physics B: Atomic, Molecular and Optical Physics, Volume 52, Number 17, 171001 (2019)
<https://DOI.org/10.1088/1361-6455/ab26d7>
22. T. Pikuz, ... , K.A. Tanaka, ... , R. Kodama,
Development of new diagnostics based on LiF detector for pump-probe experiments,
Matter and Radiation at Extremes 3, 197 (2018)
<https://doi.org/10.1016/j.mre.2018.01.006>
23. S. Gales, K.A. Tanaka, D. Balabanski, F. Negoita, D. Stutman, O. Tesileanu, C.A. Ur, D. Ursescu, I. Andrei, S. Ataman, M. Cernaianu, L. d'Alessi, I. Dancus, B. Diaconescu, N. Djourellov, D. Filipescu, P. Ghenuche, D. Ghita, C. Matei, K. Seto, M. Zeng, N.V. Zamfir,
The Extreme Light Infrastructure - Nuclear Physics (ELI-NP) facility: new horizons in physics with 10 PW ultra-intense lasers and 20 MeV brilliant gamma beams,
Reports on Progress in Physics, Volume 81, Number 9 (2018)
<https://doi.org/10.1088/1361-6633/aacfe8>

24. T. Gong, H. Habara, Y. Uematsu, ... , K. A. Tanaka,
Confirmation of hot electron preheat with a Cu foam sphere on GEKKO-LFEX laser facility,
Physics of Plasmas 24, 112709 (2017)
<https://doi.org/10.1063/1.4999975>
25. D. Balabanski, R. Popescu, D. Stutman, K.A. Tanaka, O. Tesileanu, C.A. Ur, D. Ursescu, and N.V. Zamfir,
New light in nuclear physics: The extreme light infrastructure,
European Physics Letters, 117(2017) 28001
<http://Doi.org/10.1209/0295-5075/117/28001>
26. A. Cucoanes, D. Balabanski, F. Canova, P. Cuong, F. Negoita, F. Puicea, K. Tanaka,
On the potential of laser driven isotope generation at ELI-NP for positron emission tomography
Proc. SPIE 10239, Medical Applications of Laser-Generated Beams of Particles IV:
Review of Progress and Strategies for the Future, 102390B (7 June 2017)
<https://doi.org/10.1117/12.2273769>
27. O. Budriga, L. E. Ionel, D. Tatomirescu, K. A. Tanaka,
Enhancement of laser-focused intensity greater than 10 times through a re-entrant cone in the petawatt regime,
Optics Letters 45, No. 13, 395316, 2020,
<https://doi.org/10.1364/OL.395316>
28. I Tazes, J F Ong, O Tesileanu, K A Tanaka, N A Papadogiannis, M Tatarakis, and V Dimitrioum
Target normal sheath acceleration and laser wakefield acceleration particle-in-cell simulations performance on CPU & GPU architectures for high-power laser systems,
Plasma Phys. Control. Fusion 62 094005,(2020)
<http://DOI.org/10.1088/1361-6587/aba17a>
29. Takuo Okuchi, Yusuke Seto, Naotaka Tomioka, Takeshi Matsuoka, Bruno Albertazzi, Nicholas J. Hartley, Yuichi Inubushi, Kento Katagiri, Ryosuke Kodama, Tatiana A. Pikuz, Narangoo Purevjav, Kohei Miyamishi, Tomoko Sato, Toshimori Sekine, Keiichi Sueda, Kazuo A. Tanaka, Yoshinori Tange, Tadashi Togashi, Yuhei Umeda, Toshinori Yabuuchi, Makina Yabashi & Norimasa Ozaki,
Ultrafast olivine-ringwoodite transformation during shock compression,
Nature Communications |12, 4305(2021)
<https://doi.org/10.1038/s41467-021-24633-4>
30. N.J. Hartley, N Ozaki, T. Matsuoka....K.A. Tanaka, et al.,
Ultrafast lattice dynamics in laser -irradiated gold foils,
Appl. Phys. Lett., 110(7), 071905_1-5(2017)
<https://doi.org/10.1063/1.4976541>
31. M. Ruiz-Lpez, A Faenov, T. Pikuz...K.A.Tanaka, et al.,
Coherent X-ray beam metrology using 2D high-resolution Fresnel -Diffraction analysis
J. Synchrotron Rad., 24, 196-204, 2017
<http://doi.org/10.1107/S1600577516016568>

32. B. Alberazzi, N. Ozaki, V. Khakhovsky, K.A. Tanaka,
Dynamic fracture of tantalum under extreme tensile stress
Science Advances, 3(6), 1602705, 2017
<http://doi.org/10.1126/sciadv.1602705>
33. SN Chen, T Iwawaki, K Morita, P Antici, SD Baton, F Filippi,, H Habara, M Nkatsutsumi, P Nicolai, W Nazarov, C Rousseaux, M Staroudubstev, KA Tanaka and J Fuchs
Density and temperature characterization of long-scale length, near-critical density controlled plasma produced from ultra-low density plastic foam,
Scientific Rep., 6;21495(2016).
<http://DOI.org/10.1038/srep21495>
34. H. Habara, S. Honda, M. Kayatama, H. Sakagami, K. Nagai and KA. Tanaka,
Efficient energy absorption of intense ps-laser pulse into nanowire target
Physic of Plasmas 23, 063105 (2016)
<https://doi.org/10.1063/1.4953092>
35. Y. Hirooka, K.A. Tanaka, K Imamaura, K Okazaki, *Laboratory experimeitns on the formation and recoil jet transport of aerosl by laser ablation*
J. of Physics Conference Series 717 (1), 012094 , 2016
<http://doi.org/10.1088/1742-6596/717/1/012094>
36. R. Murakami, H. Habara, S. Ivancic,baK.A. Tanaka, *Analysis of plasma channels in mm-scale plasmas formed by high intensity laser beams,*
J. of Physics Conference Series 717(1), 012039, 2016
<http://DOI.org/10.1088/1742-6596/717/1/012039>
37. H. Habara, S. Nakaguchi, Y.Uematsu,K.A. Tanaka,
Propagation of intense short -pulse laser in homogeneous near-crtical density plasmas
J. Physics Conference Series 717(1), 012019, 2016
<https://doi.org/10.1088/1742-6596/717/1/012019>
38. R. S. Craxton, K. S. Anderson, T. R. Boehly, V. N. Goncharov, D. R. Harding, J. P. Knauer, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, J. F. Myatt, A. J. Schmitt, J. D. Sethian, R. W. Short, S. Skupsky, W. Theobald, W. L. Kruer, K. Tanaka, R. Betti, T. J. B. Collins, J. A. Delettrez, S. X. Hu, J. A. Marozas, A. V. Maximov, D. T. Michel, P. B. Radha, S. P. Regan, T. C. Sangster, W. Seka, A. A. Solodov, J. M. Soures, C. Stoeckl, J. D. Zuegel
Direct-drive inertial confinement fusion: A review.
Physics of Plasmas 11/2015; 22(11):110501.
<https://doi.org/10.1063/1.4934714>
39. Y. Mishima, H. Habara, K. A. Tanaka
Two plasmonic mode excitation using a double-step rectangle grating.
Journal of the Optical Society of America B 09/2015; 32(9):1804.

<https://doi.org/10.1364/JOSAB.32.001804>

40. D. Del Sorbo, Y. Arikawa, D. Batani, F. Beg, J. Breil, H. Chen, J.L. Feugeas, S. Fujioka, S. Hulin, M. Koga, H. MacLean, A. Morace, T. Namimoto, W. Nazarov, Ph. Nicolai, H. Nishimura, T. Ozaki, T. Sakaki, J.J. Santos, Ch. Spindloe, K.A. Tanaka, X. Vaisseau, M. Veltcheva, T. Yabuuchi, Z. Zhang: *Approach to the study of fast electron transport in cylindrically imploded targets*. Laser and Particle Beams 07/2015; 33(3):1-10.
<https://doi.org/10.1017/S0263034615000592>
41. T Iwawaki, H Habara, T Yabuuchi, M Hata, H Sakagami, K A Tanaka
Slowdown mechanisms of ultraintense laser propagation in critical density plasma. Physical Review E 07/2015; 92(1-1):013106.
<https://doi.org/10.1103/PhysRevE.92.013106>
42. H Habara, S Ivancic, K Anderson, D Haberberger, T Iwawaki, C Stoeckl, K A Tanaka, Y Uematsu, W Theobald: *Efficient propagation of ultra-intense laser beam in dense plasma*. Plasma Physics and Controlled Fusion 06/2015; 57(6).
<https://doi.org/10.1088/0741-3335/57/6/064005>
43. S. Ivancic, D. Haberberger, H. Habara, T. Iwawaki, K. S. Anderson, R. S. Craxton, D. H. Froula, D. D. Meyerhofer, C. Stoeckl, K. A. Tanaka, W. Theobald
Channeling of multikilojoule high-intensity laser beams in an inhomogeneous plasma. Physical Review E 05/2015; 91(5).
<https://doi.org/10.1103/PhysRevE.91.051101>
44. Kazushige Takaki, Kei Kageyama, Atsushi Sunahara, Toshinori Yabuuchi, Kazuo A. Tanaka: *Simulated ablation of carbon wall by alpha particles for a laser fusion reactor*. Journal of Nuclear Materials 04/2015; 459.
<https://doi.org/10.1016/j.jnucmat.2015.01.005>
45. T. Iwawaki, H. Habara, S. Baton, K. Morita, J. Fuchs, S. Chen, M. Nakatsutsumi, C. Rousseaux, F. Filippi, W. Nazarov, K. A. Tanaka
Collimated fast electron beam generation in critical density plasma. Physics of Plasmas 11/2014; 21(11):113103.
<https://doi.org/10.1063/1.4900868>
46. Y. Uematsu, S. Ivancic, T. Iwawaki, H. Habara, A. L. Lei, W. Theobald, K. A. Tanaka
Measuring the strong electrostatic and magnetic fields with proton radiography for ultra-high intensity laser channeling on fast ignition. Review of Scientific Instruments 10/2014; 85(11).
<https://doi.org/10.1063/1.4890575>
47. E. Guillaume, K. Humphrey, H. Nakamura, R. M. G. M. Trines, R. Heathcote, M. Galimberti, Y. Amano, D. Doria, G. Hicks, E. Higson, S. Kar, G. Sarri, M. Skramic, J. Swain, K. Tang, J. Weston, P. Zak, E. P. Alves, R. A. Fonseca, F. Fiúza, H. Habara, K. A. Tanaka, R. Bingham, M.

- Borghesi, Z. Najmudin, L. O. Silva, P. A. Norreys:
Demonstration of laser pulse amplification by stimulated Brillouin scattering.
High Power Laser Science and Engineering, 2, e33 (2014).
<https://doi.org/10.1017/hpl.2014.35>
48. K. Nishimura, R. Shibata, T. Yabuuchi, A. Sunahara, K.A. Tanaka
Laser scattered images observed from carbon plasma stagnation and following molecular formation.
Applied Physics Letters 06/2014; 104(24):244105-244105-3.
<https://doi.org/10.1063/1.4883918>
49. H. B. Zhuo, Z. L. Chen, Z. M. Sheng, M. Chen, T. Yabuuchi, M. Tampo, M. Y. Yu, X. H. Yang, C. T. Zhou, K. A. Tanaka, J. Zhang, R. Kodama
Collimation of Energetic Electrons from a Laser-Target Interaction by a Magnetized Target Back Plasma Preformed by a Long-Pulse Laser.
Physical Review Letters 05/2014; 112(21).
<https://doi.org/10.1103/PhysRevLett.112.215003>
50. M. Tabak, P. Norreys, V.T. Tikhonchuk, K.A. Tanaka:
Alternative ignition schemes in inertial confinement fusion.
Nuclear Fusion 04/2014; 54(5):054001.
<https://doi.org/10.1088/0029-5515/54/5/054001>
51. Y. Hirooka, H. Sato, K. Ishihara, T. Yabuuchi, K. A. Tanaka
Formation of carbon allotrope aerosol by colliding plasmas in an inertial fusion reactor.
Nuclear Fusion 01/2014; 54(2), 022003-4
<https://doi.org/10.1088/0029-5515/54/2/022003>
52. K. F. Al-Shboul, S. S. Harilal, S. M. Hassan, A. Hassanein, JT Costello, T Yabuuchi, KA Tanaka, Y Hirooka.
Interpenetration and stagnation in colliding laser plasmas.
Physics of Plasmas 01/2014; 21(1):013502.
<https://doi.org/10.1063/1.4859136>
53. Katsuhiro Mikami, Shinji Motokoshi, Toshihiro Somekawa, Takahisa Jitsuno, Masayuki Fujita, Kazuo A Tanaka
Temperature dependence of laser
Optics Express, 21, 28719-28728(2013)
<https://doi.org/10.1364/OE.21.028719>
54. H. Nishimura, Z. Zhang, T. Namimoto, S. Fujioka, M. Koga, H. Shiraga, T. Ozaki, T. Iwawaki, T. Morioka, K. Morita, H. Habara, K. A. Tanaka, M. Nishikino, T. Kawachi, A. Sagisaka, S. Orimo, A.S. Pirozhkov, K. Ogura, A. Yogo, H. Kiriya, K. Kondo, T. Shimomura, S. Kanazawa, Y. Okano
Absolute Ka line spectroscopy for cone-guided fast-ignition targets.

- The European Physical Journal Conferences 11/2013; 59:13008-
<https://doi.org/10.1051/epjconf/20135913008>
55. A. Okabayashi, H. Habara, T. Yabuuchi, K. A. Tanaka
Electron energy distributions through superdense matter by Monte-Carlo simulations.
The European Physical Journal Conferences 11/2013; 59:17018-
<https://doi.org/10.1051/epjconf/20135917018>
56. H.Azechi, K.Mima, S.Shiraga, S.Fujioka, H.Nagatomo, T.Johzaki, T.Jitsuno, M.Key, R.Kodama, M.Koga, K.Kondo, J.Kawanaka, N.Miyanaga, M.Murakami, K.Nagai, M.Nakai, H.Nakamura, T.Nakamura, T.Nakazato, Y.Nakao, K.Nishihara, H.Nishimura, T.Norimatsu, P.Norreys, T.Ozaki, J.Pasley, H.Sakagami, Y.Sakawa, N.Sarukura, K.Shigemori, T.Shimizu, A.Sunahara, T.Taguchi, K.A.Tanaka, K.Tsubakimoto, Y.Fujimoto, H.Homma, A.Iwamoto
Present status of fast ignition realization experiment and inertial fusion energy development.
Nuclear Fusion 10/2013; 53(10).
<https://doi.org/10.1088/0029-5515/53/10/104021>
57. A. Okabayashi, H. Habara, T. Yabuuchi, T. Iwawaki, K. A. Tanaka
Stopping and transport of fast electrons in superdense matter.
Physics of Plasmas 08/2013; 20(8).
<https://doi.org/10.1063/1.4816812>
58. K Mikami, S Motokoshi, T Somekawa, T Jitsuno, M Fujita, KA Tanaka
Laser-Induced Damage Thresholds at Different Temperature for Optical Devices.
The International Society for Optical Engineering 07/2013; 8786.
<https://doi.org/10.1117/12.2019870>
59. W Schumaker, N Nakanii, C McGuffey, C Zulick, V Chyvkov, F Dollar, H Habara, G Kalintchenko, A Maksimchuk, K A Tanaka, A G R Thomas, V Yanovsky, K Krushelnick
Ultrafast Electron Radiography of Magnetic Fields in High-Intensity Laser-Solid Interactions.
Physical Review Letters 01/2013; 110(1):015003.
<https://doi.org/10.1103/PhysRevLett.110.015003>
60. Jesus ALVAREZ, Kunioki MIMA, Kazuo A. TANAKA, Javier FERNANDEZ, David GAROZ, Hideaki HABARA, Kenshiro KIKUYAMA, Kiminori KONDO, Jose M. PERLADO:
Ultraintense Lasers as a Promising Research Tool for Fusion Material Testing: Production of Ions, X-Rays and Neutrons.
Plasma and Fusion Research 01/2013; 8:3404055-3404055.
<https://doi.org/10.1585/pfr.8.3404055>
61. H. Shiraga, S. Fujioka, M. Nakai, T. Watari, H. Nakamura, Y. Arikawa, H. Hosoda, T. Nagai, M. Koga, H. Kikuchi, Y. Ishii, T. Sogo, K. Shigemori, H. Nishimura, Z. Zhang, M. Tanabe, S. Ohira, Y. Fujii, T. Namimoto, Y. Sakawa, O. Maegawa, T. Ozaki, K.A. Tanaka, H. Habara, T. Iwawaki, K. Shimada, M. Key, P. Norreys, J. Pasley, H. Nagatomo, T. Johzaki, A. Sunahara, M. Murakami, H. Sakagami, T. Taguchi, T. Norimatsu, H. Homma, Y. Fujimoto, A. Iwamoto, N. Miyanaga, J.

Kawanaka, T. Kanabe, T. Jitsuno, Y. Nakata, K. Tsubakimoto, K. Sueda, R. Kodama, K. Kondo, N. Morio, S. Matsuo, T. Kawasaki, K. Sawai, K. Tsuji, H. Murakami, N. Sarukura, T. Shimizu, K. Mima, H. Azechi

Implosion and heating experiments of fast ignition targets by Gekko-XII and LFEX lasers.

The European Physical Journal Conferences 01/2013; 59:01008.

<https://doi.org/10.1051/epjconf/20135901008>

62. Alvarez J Ruiz, A Rivera, K. Mima, D. Garoz, R. Gonzalez-Arrabal, N. Gordillo, J. Fuchs, K. Tanaka, I. Fernandez, F. Briones, others
Plasma-wall interaction in laser inertial fusion reactors: Novel proposals for radiation tests of first wall materials.
Plasma Physics and Controlled Fusion 12/2012; 54(12-12):124051.
<https://doi.org/10.1088/0741-3335/54/12/124051>
63. Y Kuramitsu, Y Sakawa, T Morita, T Ide, K Nishio, H Tanji, H Aoki, S Dono, C D Gregory, J N Waugh, N Woolsey, A Dizière, A Pelka, A Ravasio, B Loupiau, M Koenig, S A Pikuz, Y T Li, Y Zhang, X Liu, J Y Zhong, J Zhang, G Gregori, N Nakanii, K Kondo, Y Mori, E Miura, R Kodama, Y Kitagawa, K Mima, K A Tanaka, H Azechi, T Moritaka, Y Matsumoto, T Sano, A Mizuta, N Ohnishi, M Hoshino, H Takabe: *Laboratory investigations on the origins of cosmic rays.*
Plasma Physics and Controlled Fusion 11/2012; 54(12):124049.
<https://doi.org/10.1088/0741-3335/54/12/124049>
64. Katsuhiro Mikami, Shinji Motokoshi, Toshihiro Somekawa, Takahisa Jitsuno, Masayuki Fujita, Kazuo A. Tanaka: *Temperature Dependence of Laser-Induced Damage Thresholds by Short Pulse Laser.*
The International Society for Optical Engineering 11/2012; 8530:05-
<https://doi.org/10.1117/12.976275>
65. Yoshi Hirooka, Naoki Omoto, Tatsuya Oishi, Kazuo A. Tanaka
Aerosol formation and hydrogen co-deposition by colliding ablation plasma plumes of carbon.
Fusion Engineering and Design 10/2012; 87(10).
<https://doi.org/10.1016/j.fusengdes.2011.10.003>
66. H. Shiraga, S. Fujioka, M. Nakai, T. Watari, H. Nakamura, Y. Arikawa, H. Hosoda, T. Nagai, M. Koga, H. Kikuchi, Y. Ishii, T. Sogo, K. Shigemori, H. Nishimura, Z. Zhang, M. Tanabe, S. Ohira, Y. Fujii, T. Namimoto, Y. Sakawa, O. Maegawa, T. Ozaki, K.A. Tanaka, H. Habara, T. Iwawaki, K. Shimada, H. Nagatomo, T. Johzaki, A. Sunahara, M. Murakami, H. Sakagami, T. Taguchi, T. Norimatsu, H. Homma, Y. Fujimoto, A. Iwamoto, N. Miyanaga, J. Kawanaka, T. Jitsuno, Y. Nakata, K. Tsubakimoto, K. Sueda, N. Morio, S. Matsuo, T. Kawasaki, K. Sawai, K. Tsuji, H. Murakami, T. Kanabe, K. Kondo, R. Kodama, N. Sarukura, T. Shimizu, K. Mima, H. Azechi
Integrated experiments of fast ignition targets by Gekko-XII and LFEX lasers.
High Energy Density Physics 09/2012; 8(3):227–230.
<https://doi.org/10.1016/j.hedp.2012.03.008>

67. T. Tanimoto, M. Nishiuchi, Y. Mishima, K. Kikuyama, T. Morioka, K. Morita, M. Kanasaki, A. S. Pirozhkov, A. Yogo, K. Ogura, Y. Fukuda, H. Sakaki, A. Sagisaka, H. Habara, K. A. Tanaka, K. Kondo
Electron Energy Transport in the Thin Foil Driven by High Contrast High Intensity Laser Pulse.
AIP Conference Proceedings 1465, 148 (2012); 1465(1).
<https://doi.org/10.1063/1.4737554>
68. Katsuhiro Mikami, Shinji Motokoshi, Masayuki Fujita, Toshihiro Somekawa, Takahisa Jitsuno, Kazuo A Tanaka
Temperature Dependences of Laser Induced Plasma Thresholds and Periodic Structures by Nanosecond Infrared Laser for Copper, Iron, and Chrome.
Applied Physics Express 06/2012; 5(6):2701-.
<https://doi.org/10.1143/APEX.5.062701>
69. Takuya Kono, Akinori Ishikawa, Seigo Misaki, Atsushi Sunahara, Satoshi Tanaka, Toshinori Yabuuchi, Yoshi Hirooka, Kazuo A Tanaka
Material Dependence on Plasma Shielding Induced by Laser Ablation. Plasma and Fusion Research 01/2012; 7:2405065-2405065.
<https://doi.org/10.1585/pfr.7.2405065>
70. H Shiraga, S Fujioka, M Nakai, T Watari, H Nakamura, Y Arikawa, H Hosoda, T Nagai, M Koga, H Kikuchi, Y Ishii, T Sogo, K Shigemori, H Nishimura, Z Zhang, M Tanabe, S Ohira, Y Fujii, T Namimoto, Y Sakawa, O Maegawa, T Ozaki, K Tanaka, H Habara, T Iwawaki, K Shimada, H Nagatomo, T Johzaki, A Sunahara, M Murakami, H Sakagami, T Taguchi, T Norimatsu, H Homma, Y Fujimoto, A Iwamoto, N Miyanaga, J Kawanaka, T Jitsuno, Y Nakata, K Tsubakimoto, N Morio, T Kawasaki, K Sawai, K Tsuji, H Murakami, T Kanabe, K Kondo, N Sarukura, T Shimizu, K Mima, H Azechi
Fast ignition integrated experiments with Gekko and LFEX lasers.
Plasma Physics and Controlled Fusion 11/2011; 53(12):124029.
<https://doi.org/10.1088/0741-3335/53/12/124029>
71. Mayuko Koga, Y. Arikawa, H. Azechi, Y. Fujimoto, S. Fujioka, H. Habara, Y. Hironaka, H. Homma, H. Hosoda, T. Jitsuno, T. Johzaki, J. Kawanaka, R. Kodama, K. Mima, N. Miyanaga, M. Murakami, H. Nagatomo, M. Nakai, Y. Nakata, H. Nakamura, H. Nishimura, T. Norimatsu, Y. Sakawa, N. Sarukura, K. Shigemori, H. Shiraga, T. Shimizu, H. Takabe, M. Tanabe, K.A. Tanaka, T. Tanimoto, T. Tsubakimoto, T. Watari, A. Sunahara, M. Isobe, A. Iwamoto, T. Mito, O. Motojima, T. Ozaki, H. Sakagami, T. Taguchi, Y. Nakao, H. Cai, M. Key, P. Norreys, J. Pasley
Present states and future prospect of fast ignition realization experiment (FIREX) with Gekko and LFEX Lasers at ILE.
Nuclear Instruments and Methods in Physics Research Section A Accelerators Spectrometers Detectors and Associated Equipment 10/2011; 653(1):84–88.
<https://doi.org/10.1016/j.nima.2011.01.101>
72. K. Mikami, S. Motokoshi, M. Fujita, T. Jitsuno, K. A. Tanaka
Laser-Induced Damage Thresholds of Optical Coatings at Different Temperature.
The International Society for Optical Engineering 10/2011; 8190:9-.

<https://doi.org/10.1117/12.899033>

73. W. Theobald, A. A. Solodov, C. Stoeckl, K. S. Anderson, R. Betti, T. R. Boehly, R. S. Craxton, J. A. Delettrez, C. Dorrer, J. A. Frenje, V. Yu. Glebov, H. Habara, K. A. Tanaka, J. P. Knauer, R. Lauck, F. J. Marshall, K. L. Marshall, D. D. Meyerhofer, P. M. Nilson, P. K. Patel, H. Chen, T. C. Sangster, W. Seka, N. Sinenian, T. Ma, F. N. Beg, E. Giraldez, R. B. Stephens
Initial cone-in-shell fast-ignition experiments on OMEGA.
Physics of Plasmas 05/2011; 18(5):056305-056305-11.
<https://doi.org/10.1063/1.3566082>
74. L. M. Goldman, W. Seka, K. Tanaka, R. Short, A. Simon
The use of laser harmonic spectroscopy as a target diagnostic.
Canadian Journal of Physics 02/2011; 64(8):969-976.
<https://doi.org/10.1139/p86-166>
75. Y Kuramitsu, N Nakanii, K Kondo, Y Sakawa, Y Mori, E Miura, K Tsuji, K Kimura, S Fukumochi, M Kashihara, T Tanimoto, H Nakamura, T Ishikura, K Takeda, M Tampo, R Kodama, Y Kitagawa, K Mima, K A Tanaka, M Hoshino, H Takabe
Experimental evidence of nonthermal acceleration of relativistic electrons by an intensive laser pulse.
Physical Review E 02/2011; 83(2 Pt 2):026401.
<https://doi.org/10.1103/PhysRevE.83.026401>
76. Y. Kuramitsu, N. Nakanii, K. Kondo, Y. Sakawa, Y. Mori, E. Miura, K. Tsuji, K. Kimura, S. Fukumochi, M. Kashihara, T. Tanimoto, H. Nakamura, T. Ishikura, K. Takeda, M. Tampo, R. Kodama, Y. Kitagawa, K. Mima, K. A. Tanaka, M. Hoshino, H. Takabe
Model experiment of cosmic ray acceleration due to an incoherent wakefield induced by an intense laser pulse.
Physics of Plasmas 01/2011; 18(1).
<https://doi.org/10.1063/1.3528434>
77. Katsuhiro MIKAMI, Shinji MOTOKOSHI, Masayuki FUJITA, Takahisa JITSUNO, Kazuo A. TANAKA: *Measurements of Nonlinear Refractive Indices for Silica Glass Using Z-Scan Method.*
The Review of Laser Engineering 01/2011; 39(12):927-930.
<https://doi.org/10.2184/laj.39.927>
78. T. Muroga, D.K. Sze, K. Okuno, T. Terai, A. Kimura, R.J. Kurtz, A. Sagara, R. Nygren, Y. Ueda, R.P. Doerner, J.P. Sharpe, T. Kunugi, N.B. Morley, Y. Hatano, M.A. Sokolov, T. Yamamoto, A. Hasegawa, Y. Katoh, N. Ohno, K. Tokunaga, S. Konishi, S. Fukada, P. Calderoni, T. Yokomine, K. Messadek, Y. Oya, N. Hashimoto, T. Hinoki, H. Hashizume, T. Norimatsu, T. Shikama, R.E. Stoller, K.A. Tanaka, M.S. Tillack
Midterm Summary of Japan-US Fusion Cooperation Program TITAN.
Fusion Science and Technology 01/2011; 60:321-328.
<https://doi.org/10.13182/FST11-A12373>

79. Y. Hirooka, N. Omoto, T. Kono, T. Oishi, K. A. Tanaka
Cluster formation and hydrogen co-deposition by colliding ablation plasma plumes of lithium and lead.
IEEE International Conference on Plasma Science 01/2011;
<https://doi.org/10.1109/PLASMA.2011.5993012>
80. D. C. Swift, J. M. McNaney, D. S. Hey, S. Le Pape, A. MacKinnon, D. P. Higginson, T. Bartal, L. C. Jarrott, D. Mariscal, F. N. Beg, K. L. Lancaster, N. Nakanii, H. Nakamura, R. Kodama, K. A. Tanaka: *Laser Generated Neutron Source for Temperature Measurement.*
Physics of Plasmas 17, 100701 (2010)
<https://doi.org/10.1063/1.3484218>
81. A. Sunahara, K.A. Tanaka
Atomic number Z dependence of dynamics of laser-ablated materials.
Fusion Engineering and Design 11/2010; 85(6-85):935-939.
<https://doi.org/10.1016/j.fusengdes.2010.09.017>
82. G Sarri, KL Lancaster, R Trines, EL Clark, S Hassan, J Jiang, N Kageiwa, N Lopes, R Ramis, A Rehman, X Ribeyre, C Russo, RHH Scott, T Tanimoto, M Temporal, M Borghesi, JR Davies, Z Najmudin, KA Tanaka, M Tatarakis, PA Norreys
Creation of persistent, straight, 2 mm long laser driven channels in underdense plasmas.
Physics of Plasmas 11/2010; 17(11).
<https://doi.org/10.1063/1.3505305>
83. D. P. Higginson, J. M. McNaney, D. C. Swift, T. Bartal, D. S. Hey, R. Kodama, S. Le Pape, A. MacKinnon, D. Mariscal, H. Nakamura, N. Nakanii, K. A. Tanaka: *Laser generated neutron source for neutron resonance spectroscopy.*
Physics of Plasmas 10/2010; 17(10).
<https://doi.org/10.1063/1.3484218>
84. G Sarri, D K Singh, J R Davies, F Fiuza, K L Lancaster, E L Clark, S Hassan, J Jiang, N Kageiwa, N Lopes, A Rehman, C Russo, R H H Scott, T Tanimoto, Z Najmudin, K A Tanaka, M Tatarakis, M Borghesi, P A Norreys: *Observation of Postsoliton Expansion Following Laser Propagation through an Underdense Plasma.*
Physical Review Letters 10/2010; 105(17):175007.
<https://doi.org/10.1103/PHYSREVLETT.105.175007>
85. T Iwawaki, H Habara, T Tanimoto, N Nakanii, K Shimada, T Yabuuchi, K Kondo, K A Tanaka: *Development of multi-channel electron spectrometer.*
The Review of scientific instruments 10/2010; 81(10):10E535.
<https://doi.org/10.1063/1.3485102>
86. Y Sakawa, H Nakamura, S Oshima, M Hatakeyama, N Kageiwa, S Hino, S Tanimoto, M Tanabe, H Habara, H Homma, T Norimatsu, T Jitsuno, H Cai, W Zhou, T Johzaki, A Sunahara, H Nagatomo, H Nishimura, K A Tanaka, K Mima, H Azechi

- A model experiment of a double-cone target using a gap target.*
Journal of Physics Conference Series 09/2010; 244(4):042012.
<https://doi.org/10.1088/1742-6596/244/4/042012>
87. S Nakai, K Mima, Y Kato, K Tanaka, Y Ikeda, H Azechi, K Miyanaga, M Nakai, M Perlado, R Gonzalez Arrabal:
Industrial Applications of Laser Neutron Source.
Journal of Physics Conference Series 09/2010; 244(4):042027.
<https://doi.org/10.1088/1742-6596/244/4/042027>
88. K Shimada, N Nakanii, I Murata, H Habara, K A Tanaka:
Measurement of fast neutron by using imaging plate.
Journal of Physics Conference Series 09/2010; 244(3):032059.
<https://doi.org/10.1088/1742-6596/244/3/032059>
89. Y Hirooka, K A Tanaka, H Sato, K Ishihara, A Sunahara
Laboratory experiments on cluster/aerosol formation by colliding ablation plumes.
Journal of Physics Conference Series 09/2010; 244(3):032033.
<https://doi.org/10.1088/1742-6596/244/3/032033>
90. H Habara, M Hatakeyama, T Tanimoto, N Kageiwa, S Hino, A L Lei, K A Tanaka
Stable single channel formation in long scale plasma for fast ignition.
Journal of Physics Conference Series 09/2010; 244(2):022035.
<https://doi.org/10.1088/1742-6596/244/2/022035>
91. T Tanimoto, H Habara, K A Tanaka, R Kodama, M Nakatsutsumi, K L Lancaster, J S Green, R H Scott, M Sherlock, P A Norreys, R G Evans, M G Haines, S Kar, M Zepf, J King, T Ma, M S Wei, T Yabuuchi, F N Beg, M H Key, P Nilson, R B Stephens, H Azechi, K Nagai, T Norimatsu, K Takeda, J Valente, J R Davies
Measurement of Fast Electrons Spectra Generated by Interaction between Solid Target and Peta Watt Laser.
Journal of Physics Conference Series 09/2010; 244(2):022067.
<https://doi.org/10.1088/1742-6596/244/2/022067>
92. M. Tampo, S. Awano, P. R. Bolton, K. Kondo, K. Mima, Y Mori, H. Nakamura, M. Nakatsutsumi, R. B. Stephens, K. A. Tanaka, T. Tanimoto, T. Yabuuchi, R. Kodama
Correlation between laser accelerated MeV proton and electron beams using simple fluid model for target normal sheath acceleration.
Physics of Plasmas 17, 073110 (2010).
<https://doi.org/10.1063/1.3459063>
93. T Yabuuchi, B S Paradkar, M S Wei, J A King, F N Beg, R B Stephens, N Nakanii, M Hatakeyama, H Habara, K Mima, K A Tanaka, J T Larsen
Transport study of intense-laser-produced fast electrons in solid targets with a preplasma created by a long pulse laser.

Physics of Plasmas 06/2010; 17(6):060704.

<https://doi.org/10.1063/1.3447878>

94. Hideaki Habara, Kazuhide Ohta, Kazuo A Tanaka, G. Ravindra Kumar, M Krishnamurthy, Subhendu Kahaly, Sudipta Mondal, Manoj Kumar Bhuyan, R Rajeev, Jian Zheng
Measurements of high energy density electrons via observation of Cherenkov radiation.
Physics of Plasmas 05/2010; 17(5).
<https://doi.org/10.1063/1.3346370>
95. Hideaki Habara, Guang Xu, Takahisa Jitsuno, Ryosuke Kodama, Kenji Suzuki, Kiyonobu Sawai, Kiminori Kondo, Noriaki Miyanaga, Kazuo A Tanaka, Kunioki Mima, Michael C. Rushford, Jerald A Britten, Christopher P. J. Barty
Pulse compression and beam focusing with segmented diffraction gratings in a high-power chirped-pulse amplification glass laser system.
Optics Letters 04/2010; 20(31).
<https://doi.org/10.1364/OL.35.001783>
96. H Sato, Y Hirooka, K A Tanaka, K Ishihara: *Dynamics of colliding ablation plumes*,
Journal of Plasma and Fusion Research SERIES (JPFR SERIES). 9 P.432-P.435(2010).
<https://doi.org/10.1364/OL.35.001783>
97. H. Nishimura, H. Azechi, K. Mima, Y. Fujimoto, S. Fujioka, H. Homma, T. Jitsuno, T. Johzaki, M. Koga, J. Kawanaka, T. Kawasaki, N. Miyanaga, H. Murakami, M. Murakami, H. Nagatomo, N. Morio, K. Nagai, M. Nakai, T. Nakamura, T. Nakazato, Y. Nakata, K. Nishihara, T. Norimatsu, Y. Sakawa, N. Sarukura, K. Shigemori, T. Shimizu, H. Shiraga, K. Sueda, K. Tsubakimoto, A. Iwamoto, T. Mito, H. Sakagami, M. Isobe, T. Ozaki, O. Motojima, R. Kodama, K. A. Tanaka, H. Habara, K. Kondo, Y. Nakao, Y. Sentoku, A. Sunahara, T. Taguchi, T. Kanabe
Present status and future prospect of Fast Ignition Realization Experiment (FIREX) Project at ILE, Osaka.
AIP Conference Proceedings 1209, 83 (2010)
<https://doi.org/10.1063/1.3326327>
98. Hideaki Habara, Kazuhide Ohta, Kazuo A Tanaka, G Ravindra Kumar, M Krishnamurthy, Subhendu Kahaly, Sudipta Mondal, Manoj Kumar Bhuyan, R Rajeev, Jian Zheng: *Direct, Absolute, and In Situ Measurement of Fast Electron Transport via Cherenkov Emission.*
Physical Review Letters 02/2010; 104(5):055001.
<https://doi.org/10.1103/PHYSREVLETT.104.055001>
99. Y. Mori, Y. Sentoku, K. Kondo, K. Tsuji, N. Nakanii, S. Fukumochi, M. Kashiara, K. Kimura, K. Takeda, K. A. Tanaka, T. Norimatsu, Tsuyoshi Tanimoto, H. Nakamura, M. Tampo, R. Kodama, E. Miura, K. Mima, Y. Kitagawa: *Autoinjection of electrons into a wake field using a capillary with attached cone.*
Physics of Plasmas 12/2009; 16(12):123103-123103-6.
<https://doi.org/10.1063/1.3271152>

100. Hirotomo Nakajima, Yoshinori Shimada, Toshihiro Somekawa, Masayuki Fujita, Kazuo A. Tanaka: *Nondestructive Sensor Using Microwaves From Laser Plasma by Subnanosecond Laser Pulses*.
IEEE Geoscience and Remote Sensing Letters 11/2009; 6(4-6):718 - 722.
<https://doi.org/10.1109/LGRS.2009.2024176>
101. P.A. Norreys, R.H.H. Scott, K.L. Lancaster, J.S. Green, A.P.L. Robinson, M. Sherlock, R.G. Evans, M.G. Haines, S. Kar, M. Zepf, M.H. Key, J. King, T. Ma, T. Yabuuchi, M.S. Wei, F.N. Beg, P. Nilson, W. Theobald, R.B. Stephens, J. Valente, J.R. Davies, K. Takeda, H. Azechi, M. Nakatsutsumi, T. Tanimoto, R. Kodama, K.A. Tanaka
Recent fast electron energy transport experiments relevant to fast ignition inertial fusion.
Nuclear Fusion 10/2009; 49(10-10).
<https://doi.org/10.1088/0029-5515/49/10/104023>
102. H. Azechi, K. Mima, Y. Fujimoto, S. Fujioka, H. Homma, M. Isobe, A. Iwamoto, T. Jitsuno, T. Johzaki, R. Kodama, M. Koga, K. Kondo, J. Kawanaka, T. Mito, N. Miyanaga, O. Motojima, M. Murakami, H. Nagatomo, K. Nagai, M. Nakai, H. Nakamura, T. Nakamura, T. Nakazato, Y. Nakao, K. Nishihara, H. Nishimura, T. Norimatsu, T. Ozaki, H. Sakagami, Y. Sakawa, N. Sarukura, K. Shigemori, T. Shimizu, H. Shiraga, A. Sunahara, T. Taguchi, K.A. Tanaka, K. Tsubakimoto
Plasma physics and laser development for the Fast-Ignition Realization Experiment (FIREX) Project.
Nuclear Fusion 09/2009; 49(10):104024.
<https://doi.org/10.1088/0029-5515/49/10/104024>
103. Kazuo A. Tanaka: *Summary of inertial fusion sessions*.
Nuclear Fusion 09/2009; 49(10):104004.
<https://doi.org/10.1088/0029-5515/49/10/104004>
104. T Yabuuchi, A Das, G R Kumar, H Habara, P K Kaw, R Kodama, K Mima, P A Norreys, S Sengupta, K A Tanaka: *Evidence of anomalous resistivity for hot electron propagation through a dense fusion core in fast ignition experiments*.
New Journal of Physics 09/2009; 11(11).
<https://doi.org/10.1088/1367-2630/11/9/093031>
105. J.H. Bin, A.L. Lei, X.Q. Yang, L.G. Huang, M.Y. Yu, Wei Yu, K.A. Tanaka: *Quasi-monoenergetic proton beam generation from a double-layer solid target using an intense circularly polarized laser*.
Laser and Particle Beams 08/2009; 27(03):485 - 490.
<https://doi.org/10.1017/S0263034609990218>
106. M. Mori, K. Kondo, Y. Mizuta, M. Kando, H. Kotaki, M. Nishiuchi, M. Kado, A. S. Pirozhkov, K. Ogura, H. Sugiyama, S. V. Bulanov, K. A. Tanaka
Generation of stable and low-divergence 10MeV quasimonoenergetic electron bunch using argon gas jet. Physical Review Special Topics - Accelerators and Beams 08/2009; 12(8).

<https://doi.org/10.1103/PhysRevSTAB.12.082801>

107. Tsuyoshi Tanimoto, H Habara, R Kodama, M Nakatsutsumi, Kazuo A. Tanaka, KL Lancaster, JS Green, RHH Scott, M Sherlock, PA Norreys, RG Evans, MG Haines, S Kar, M Zepf, J King, T Ma, MS Wei, T Yabuuchi, FN Beg, MH Key, P Nilson, RB Stephens, H. Azechi, K Nagai, T. Norimatsu, K Takeda, J Valente, JR Davies: *Measurements of fast electron scaling generated by petawatt laser systems*.
Physics of Plasmas 06/2009; 16(6).
<https://doi.org/10.1063/1.3155086>
108. A.L. Lei, K. A. Tanaka, R. Kodama, K. Adumi, H. Habara, Y. Kitagawa, K. Kondo, T. Matsuoka, T. Tanimoto, T. Yabuuchi, K. Mima, K. Nagai, H. Nagatomo, T. Norimatsu, K. Sawai, K. Suzuki, Wei Yu, Han Xu, X. Q. Yang, L. H. Cao, H. B. Cai, Y. Sentoku, A. Pukhov, R. Kumar, R. Snively, R. Freeman, Min Yu, J. Zheng
Study of ultraintense laser propagation in overdense plasmas for fast ignition.
Physics of Plasmas 04/2009; 16(5).
<https://doi.org/10.1063/1.3101912>
109. W. Yu, L. Cao, M.Y. Yu, H. Cai, H. Xu, X. Yang, A. Lei, K.A. Tanaka, R. Kodama: *Plasma channeling by multiple short-pulse lasers*.
Laser and Particle Beams 02/2009; 27(01):109 - 114.
<https://doi.org/10.1017/S0263034609000160>
110. A.L. Lei, L. H. Cao, X. Q. Yang, K. A. Tanaka, R. Kodama, X. T. He, K. Mima, T. Nakamura, T. Norimatsu, W. Yu, W. Y. Zhang
Guiding and confining fast electrons by transient electric and magnetic fields with a plasma inverse cone.
Physics of Plasmas 02/2009; 16(2):020702-020702-4.
<https://doi.org/10.1063/1.3075928>
111. H Nakamura, B Chrisman, T Tanimoto, M Borghesi, K Kondo, M Nakatsutsumi, T Norimatsu, M Tampo, K A Tanaka, T Yabuuchi, Y Sentoku, R Kodama: *Superthermal and Efficient-Heating Modes in the Interaction of a Cone Target with Ultraintense Laser Light*.
Physical Review Letters 01/2009; 102(4):045009.
<https://doi.org/10.1103/PHYSREVLETT.102.045009>
112. T. Yabuuchi, M. S. Wei, B. S. Paradkar, J. A. King, F. N. Beg, R. B. Stephens, M. Hatakeyama, N. Nakanii, H. Habara, K. Mima, K. A. Tanaka: *Intense-laser generated fast electron transport in a large preplasma created by a long pulse laser*.
IEEE International Conference on Plasma Science 01/2009;
<https://doi.org/10.1109/PLASMA.2009.5227292>
113. Hiroto Nakajima, Yoshinori Shimada, Toshihiro Somekawa, Masayuki Fujita, Kazuo A. Tanaka: *Nondestructive Sensor Using Microwaves from a Laser Plasma*.
Plasma and Fusion Research 01/2009; 4:3-003.

<https://doi.org/10.1585/pfr.4.003>

114. A Okabayashi, T Yabuuchi, H Habara, K A Tanaka
Monte-Carlo Simulations for Heating of Superdense Matter by Relativistic Electrons.
J. Plasma Fusion Res. Series 8, 1222 2010.
115. Tsuyoshi Tanimoto, Kazuhide Ohta, Hideaki Habara, Toshinori Yabuuchi, Ryosuke Kodama, Motonobu Tampo, Jian Zheng, Kazuo A Tanaka: *Use of imaging plates at near saturation for high energy density particles.* The Review of scientific instruments 11/2008; 79(10):10E910.
<https://doi.org/10.1063/1.2987679>
116. T Matsuoka, A Lei, T Yabuuchi, K Adumi, J Zheng, R Kodama, K Sawai, K Suzuki, Y Kitagawa, T. Norimatsu, K Nagai, H Nagatomo, Y Izawa, K. Mima, Y Sentoku, K A Tanaka: *Focus optimization of relativistic self-focusing for anomalous laser penetration into overdense plasmas (super-penetration).* Plasma Physics and Controlled Fusion 09/2008; 50(10).
<https://doi.org/10.1088/0741-3335/50/10/105011>
117. Michael C Rushford, Jerald A Britten, Christopher P J Barty, Takahisa Jitsuno, Kiminori Kondo, Noriaki Miyanaga, Kazuo A Tanaka, Ryosuke Kodama, Guang Xu
Split-aperture laser pulse compressor design tolerant to alignment and line-density differences. Optics Letters 09/2008; 33(16):1902-4.
<https://doi.org/10.1364/OL.33.001902>
118. N. Nakanii, K. Kondo, Y. Kuramitsu, Y. Mori, E. Miura, K. Tsuji, K. Kimura, S. Fukumochi, M. Kashihara, T. Tanimoto, H. Nakamura, T. Ishikura, K. Takeda, M. Tampo, H. Takabe, R. Kodama, Y. Kitagawa, K. Mima, K. A. Tanaka: *Spectrum modulation of relativistic electrons by laser wakefield.* Applied Physics Letters 08/2008; 93(8):081501-081501-3.
<https://doi.org/10.1063/1.2971235>
119. N Nakanii, K Kondo, T Yabuuchi, K Tsuji, K A Tanaka, S Suzuki, T Asaka, K Yanagida, H Hanaki, T Kobayashi, K Makino, T Yamane, S Miyamoto, K Horikawa
Absolute calibration of imaging plate for GeV electrons.
Review of Scientific Instruments 07/2008; 79(6):066102
<https://doi.org/10.1063/1.2940217>
120. N. Nakanii, K. Kondo, Y. Mori, E. Miura, T. Yabuuchi, K. Tsuji, S. Suzuki, T. Asaka, K. Yanagida, H. Hanaki, T. Kobayashi, K. Makino, T. Yamane, S. Miyamoto, K. Horikawa, K. Kimura, K. Takeda, S. Fukumochi, M. Kashihara, T. Tanimoto, H. Nakamura, T. Ishikura, M. Tampo, R. Kodama, Y. Kitagawa, K. Mima, K. A. Tanaka: *High energy electron acceleration with PW-class laser system.*
AIP Conference Proceedings 1024(1):215-222, 2010
<https://doi.org/10.1063/1.2958196>
121. Wei Yu, Lihua Cao, Han Xu, Anle Lei, Xiaoqing Yang, Kazuo A. Tanaka, Ryosuke Kodama:
Plasma hole boring by multiple short-pulse lasers.

Journal of Physics Conference Series 06/2008; 112(2):022100.
<https://doi.org/10.1088/1742-6596/112/2/022100>

122. H Habara, G Xu, T Jitsuno, R Kodama, K Suzuki, K Sawai, C P J Barty, T Kawasaki, H Kitamura, K Kondo, K Mima, N Miyanaga, Y Nakata, H Shiraga, K A Tanaka, K Tsubakimoto, M C Rushford
Pulse compression using segmented grating in Gekko MII system, ILE.
Journal of Physics Conference Series 06/2008; 112(3):032017.
<https://doi.org/10.1088/1742-6596/112/3/032017>
123. Anle Lei, Wei Yu, Youwei Tian, Han Xu, Xin Wang, Xiaoqing Yang, Vinod Kumar Senecha, Kazuo A. Tanaka, Ryosuke Kodama
Effect of focus position on a high intensity laser propagation in a dense plasma.
Journal of Physics Conference Series 06/2008; 112(2):022089.
<https://doi.org/10.1088/1742-6596/112/2/022089>
124. T Jitsuno, S Motokoshi, T Okamoto, T Mikami, D Smith, M L Schattenburg, H Kitamura, H Matsuo, T Kawasaki, K Kondo, H Shiraga, Y Nakata, H Habara, K Tsubakimoto, R Kodama, K A Tanaka, N Miyanaga, K Mima: *Development of 91 cm size gratings and mirrors for LEFX laser system.*
Journal of Physics Conference Series 06/2008; 112(3):032002.
<https://doi.org/10.1088/1742-6596/112/3/032002>
125. N Nakanii, K Kondo, S Suzuki, T Kobayashi, T Asaka, K Yanagida, K Tsuji, K Makino, T Yamane, T Yabuuchi, S Miyamoto, K Horikawa, T Aratani, M Kashihara, Y Mori, H Hanaki, Y Kitagawa, K Mima, K A Tanaka
Absolute calibration of Imaging Plate for electron spectrometer measuring GeV-class electrons.
Journal of Physics Conference Series 06/2008; 112(3):032073.
<https://doi.org/10.1088/1742-6596/112/3/032073>
126. N Nakanii, K Kondo, Y Mori, E Miura, K Tsuji, K Takeda, S Fukumochi, M Kashihara, T Tanimoto, H Nakamura, T Ishikura, M Tampo, R Kodama, Y Kitagawa, K Mima, K A Tanaka
Electron acceleration in imploded hollow cylinder.
Journal of Physics Conference Series 06/2008; 112(4):042041.
<https://doi.org/10.1088/1742-6596/112/4/042041>
127. J Zheng, Z B Wang, C X Yu, X H Jiang, Z R Cao, Y K Ding, K A Tanaka
Influence of target geometry on the ion temperature of laser-produced plasmas.
Journal of Physics Conference Series 06/2008; 112(2):022040.
<https://doi.org/10.1088/1742-6596/112/2/022040>
128. H Nakamura, M Borghesi, B Chrisman, J Fuchs, K Kondo, M Nakatsutsumi, T Norimatsu, Y Sentoku, T Tanimoto, M Tampo, K A Tanaka, O Will, T Yabuuchi, R Kodama
Fast heating of wire target attached on entrant hollow cone with ultra-intense laser up to keV order. Journal of Physics Conference Series 06/2008; 112(2):022058.

<https://doi.org/10.1088/1742-6596/112/2/022058>

129. Yang Xiao-Qing, Lei An-Le, Yu Wei, Tanaka Kazuo
Natural Cone Formation for Fast Ignition of Laser Fusion.
Chinese Physics Letters 05/2008; 25(6):2151
<https://doi.org/10.1088/0256-307X/25/6/062>
130. T. Tanimoto, A. L. Lei, T. Yabuuchi, H. Habara, K. Kondo, R. Kodama, K. Mima, K. A. Tanaka
Hot Electron Spatial Distribution Under Presence of Laser Light Self-focusing in Over-dense Plasmas.
Journal of Physics Conference Series 05/2008; 112(2).
<https://doi.org/10.1088/1742-6596/112/2/022095>
131. H. Nakajima, M. Yamaura, Y. Shimada, M. Fujita, K. A. Tanaka
Ground penetrating radar using a microwave radiated from laser-induced plasma.
Journal of Physics Conference Series 05/2008; 112(4).
<https://doi.org/10.1088/1742-6596/112/4/042086>
132. T Yabuuchi, Y Sentoku, H Habara, T Matsuoka, K Adumi, Z Chen, R Kodama, K Kondo, A L Lei, K. Mima, M Tampo, T Tanimoto, K A Tanaka
Hot electron emission limited by self-excited fields from targets irradiated by ultra-intense laser pulses. Journal of Physics Conference Series 05/2008; 112(2).
<https://doi.org/10.1088/1742-6596/112/2/022093>
133. H Nakamura, Y Sentoku, T Matsuoka, K Kondo, M Nakatsutsumi, T Norimatsu, H Shiraga, K A Tanaka, T Yabuuchi, R Kodama
Fast Heating of Cylindrically Imploded Plasmas by Petawatt Laser Light.
Physical Review Letters 04/2008; 100(16):165001.
<https://doi.org/10.1103/PhysRevLett.100.165001>
134. J S Green, V M Ovchinnikov, R G Evans, K U Akli, H Azechi, F N Beg, C Bellei, R R Freeman, H Habara, R Heathcote, M H Key, J A King, K L Lancaster, N C Lopes, T Ma, A J MacKinnon, K Markey, A McPhee, Z Najmudin, P Nilson, R Onofrei, R Stephens, K Takeda, K A Tanaka, W Theobald, T Tanimoto, J Waugh, L Van Woerkom, N C Woolsey, M Zepf, J R Davies, P A Norreys
Effect of Laser Intensity on Fast-Electron-Beam Divergence in Solid-Density Plasmas.
Physical Review Letters 02/2008; 100(1):015003.
<https://doi.org/10.1103/PhysRevLett.100.015003>
135. Anle Lei, Kazuo Tanaka, Ryosuke Kodama, Ken Adumi, Hideaki Habara, Yoneyoshi Kitagawa, Kiminori Kondo, Takeshi Matsuoka, Kunioki Mima, Hideo Nagatomo, Takayoshi Norimatsu, Toshinori Yabuuchi, Wei Yu, Xiaoqing Yang, Han Xu, Youwei Tian, Xin Wang, Lihua Cao, Xiantu He, Richard Freeman, Alexander Pukhov, Ravindra Kumar, Richard Snively, Min Yu
High Intensity Laser Propagation through Overdense Plasmas.
The Review of Laser Engineering 01/2008; 36(APLS):1139-1141.

<https://doi.org/10.2184/ljsj.36.1139>

136. Zheng Lin CHEN, Min CHEN, Zhan JIN, G. Ravindra KUMAR, Motoaki NAKATSUTSUMI, Zheng Ming SHENG, Motonobu TAMPO, Kazuo A. TANAKA, Tomohisa TSUTSUMI, Hong Bin WANG, Toshinori YABUUCHI, Jie ZHANG
Plasma Devices to Control Energetic Electrons Produced by Ultra-intense Lasers.
The Review of Laser Engineering 01/2008; 36:1146-1149
<https://doi.org/10.2184/ljsj.36.1146>
137. A L Lei, A Pukhov, R Kodama, T Yabuuchi, K Adumi, K Endo, R R Freeman, H Habara, Y Kitagawa, K Kondo, G R Kumar, T Matsuoka, K Mima, H Nagatomo, T Norimatsu, O Shorokhov, R Snavely, X Q Yang, J Zheng, K A Tanaka
Relativistic laser channeling in plasmas for fast ignition.
Physical Review E 01/2008; 76(6 Pt 2):066403.
<https://doi.org/10.1103/PHYSREVE.76.066403>
138. Zheng Jian, Li Zhi-Chao, Zhang Hui, Yu Chang-Xuan, Yabuuchi Toshinori, Tanaka Kazuo
Effect of sheath potential on electromagnetic radiation emitted from the rear surface of a metallic foil target. Chinese Physics 10/2007; 16(10):3009.
<https://doi.org/10.1088/1009-1963/16/10/032>
139. Y. Ueda, M. Toda, M. Nishikawa, K. Kondo, K. A. Tanaka
Effects of repetitive ELM-like heat pulses on tungsten surface morphology. Fusion Engineering and Design 10/2007; 82(15):1904-1910. <https://doi.org/10.1016/j.fusengdes.2006.12.002>
140. R. A. Snavely, B. Zhang, K. Akli, Z. Chen, R. R. Freeman, P. Gu, S. P. Hatchett, D. Hey, J. Hill, M. H. Key, Y. Izawa, J. King, Y. Kitagawa, R. Kodama, A. B. Langdon, B. F. Lasinski, A. Lei, A. J. MacKinnon, P. Patel, R. Stephens, M. Tampo, K. A. Tanaka, R. Town, Y. Toyama, T. Tsutsumi, S. C. Wilks, T. Yabuuchi, J. Zheng
Laser generated proton beam focusing and high temperature isochoric heating of solid matter. Physics of Plasmas 09/2007; 14(9):092703-092703-5.
<https://doi.org/10.1063/1.2774001>
141. K. Mima, K. A. Tanaka, R. Kodama, T. Johzaki, H. Nagatomo, H. Shiraga, N. Miyanaga, M. Murakami, H. Azechi, M. Nakai, T. Norimatsu, K. Nagai, T. Taguchi, H. Sakagami
Recent results and future prospects of laser fusion research at ILE, Osaka.
The European Physical Journal D 07/2007; 44(2):259-264.
<https://doi.org/10.1140/epjd/e2007-00202-x>
142. M. Nakatsutsumi, R. Kodama, P. A. Norreys, S. Awano, H. Nakamura, T. Norimatsu, A. Ooya, M. Tampo, K. A. Tanaka, T. Tanimoto, T. Tsutsumi, T. Yabuuchi
Reentrant cone angle dependence of the energetic electron slope temperature in high-intensity laser-plasma interactions.
Physics of Plasmas 05/2007; 14(5).

<https://doi.org/10.1063/1.2730490>

143. T. Yabuuchi, K. Adumi, H. Habara, R. Kodama, K. Kondo, T. Tanimoto, K. A. Tanaka, Y. Sentoku, T. Matsuoka, Z. L. Chen, M. Tampo, A. L. Lei, K. Mima
On the behavior of ultraintense laser produced hot electrons in self-excited fields.
Physics of Plasmas 04/2007; 14(4):040706-040706-4.
<https://doi.org/DOI:10.1063/1.2722303>
144. Norimasa OZAKI, Ryosuke KODAMA, Kazuo A. TANAKA
Exploration of UltraHigh Pressure Condensed Matter Research with High-Power Laser.
The Review of High Pressure Science and Technology 01/2007; 17(4):304-315.
<https://doi.org/10.4131/jshpreview.17.304>
145. Toshinori Yabuuchi, Hideaki Habara, Motonobu Tampo, Ryosuke Kodama, Shinya Awano, Kiminori Kondo, Kunioki Mima, Kazuo A. Tanaka
Zonal Proton Generation from Target Edges Using Ultra-Intense Laser Pulse. Plasma and Fusion Research 01/2007; 2:3-003.
<https://doi.org/10.1585/pfr.2.003>
146. Hirotomo Nakajima, Kazuhisa Hashimoto, Michiteru Yamaura, Yoshinori Shimada, Masayuki Fujita, Kazuo A. Tanaka
Microwave Propagation via Laser Plasma Channels.
Plasma and Fusion Research 01/2007; 2:12-012.
<https://doi.org/10.1585/pfr.2.012>
147. A Benuzzi-Mounaix, M Koenig, A Ravasio, T Vinci, N Ozaki, MR Le Gloahec, B Loupiau, G Huser, E Henry, S. Bouquet, C Michaut, D Hicks, A MacKinnon, P Patel, HS Park, S Le Pape, T Boehly, M Borghesi, C Cecchetti, M Notley, R Clark, S Bandyopadhyay, S Atzeni, A Schiavi, Y Aglitskiy, A Faenov, T Pikuz, D Batani, R. Dezulian, K Tanaka
Laser-driven shock waves for the study of extreme matter states.
Plasma Physics and Controlled Fusion 12/2006; 48(12B).
<https://doi.org/10.1088/0741-3335/48/12B/S32>
148. Kunioki Mima, KA Tanaka, R Kodama, Y Kitagawa, Y Sentoku: *Plasma physics related to ultra-intense lasers.*
Physica Scripta 11/2006; 1998(T75):88.
<https://doi.org/10.1238/Physica.Topical.075a00088>
149. K Mima, K A Tanaka, R Kodama, T Johzaki, H Nagatomo, H Shiraga, Y Sentoku, N Miyanaga, H Azechi, M Nakai, T Norimatu, K Nagai, J Sunanara, K Nishihara, T Taguchi, H Sakagami
Present Status and Future Prospects of Laser Fusion Research at ILE Osaka University.
Plasma Science and Technology 10/2006; 6(1):2179.
<https://doi.org/10.1088/1009-0630/6/1/011>

150. H Habara, K Adumi, T Yabuuchi, T Nakamura, Z L Chen, M Kashihara, R Kodama, K Kondo, G R Kumar, L A Lei, T Matsuoka, K Mima, K A Tanaka
Surface Acceleration of Fast Electrons with Relativistic Self-Focusing in Preformed Plasma.
Physical Review Letters 10/2006; 97(9):095004.
<https://doi.org/10.1103/PHYSREVLETT.97.095004>
151. M. Koenig, A. Benuzzi-Mounaix, N. Ozaki, A. Ravasio, T. Vinci, S. Lepape, K. Tanaka, D. Riley
High Energy Density Physics on LULI2000 Laser Facility.
AIP Conference Proceedings 845, 1421 (2006);
<https://doi.org/10.1063/1.2263591>
152. H. Nagao, K. G. Nakamura, K. Kondo, N. Ozaki, T. Ono, K. Takamatsu, K. A. Tanaka, K. Nagai, M. Nakai, K. Wakabayashi, K. Okada, M. Yoshida
Equation of State of Diamond under Shock Compression up to 2 TPa.
AIP Conference Proceedings 845, 111 (2006)
<https://doi.org/10.1063/1.2263277>
153. Y Hama, K Kondo, A Zoubir, T Honda, R Kodama, KA Tanaka, K Mima
Single-shot two-dimensional spectral interferometry for ultrafast laser-produced plasmas.
Optics Letters 07/2006; 31(12):1917-9.
<https://doi.org/10.1364/OL.31.001917>
154. A L Lei, K A Tanaka, R Kodama, G R Kumar, K Nagai, T Norimatsu, T Yabuuchi, K Mima:
Optimum Hot Electron Production with Low-Density Foams for Laser Fusion by Fast Ignition.
Physical Review Letters 07/2006; 96(25):255006.
<https://doi.org/10.1103/PhysRevLett.96.255006>
155. A.L. Lei, K. A. Tanaka, A. Pukhov, R. Kodama, T. Yabuuchi, K. Adumi, R. R. Freeman, Y. Izawa, Y. Kitagawa, K. Kondo, G. R. Kumar, T. Matsuoka
Relativistic laser channeling into high-density plasmas. Journal de Physique IV (Proceedings) 06/2006; 133:409-412.
<https://doi.org/10.1051/jp4:2006133082>
156. T. A. Mehlhorn, R. B. Campbell, R. Kodama, K. A. Tanaka, D. R. Welch, S. A. Slutz, R. A. Vesey, D. L. Hanson, M. E. Cuneo, and J. L. Porter
Simulation of heating-compressed fast-ignition cores by petawatt laser-generated electrons.
Journal de Physique IV (Proceedings) 06/2006; 133:391.
<https://doi.org/10.1051/jp4:2006133078>
157. N Miyanaga, H Azechi, T Jitsuno, J Kawanaka, Y Fujimoto, H Shiraga, K Tsubakimoto, Y Nakata, J Lu, G Xu, K Sueda, N Morio, S Matsuo, T Kawasaki, H Kitamura, H Matsuo, T Sakamoto, Y Izawa, K Mima, K A Tanaka, R Kodama, K Knodo, H Habara, T Kanabe:
Development of 10-kJ PW Laser for the FIREX-I Program.
Journal de Physique IV (Proceedings) 06/2006; 133(1).

<https://doi.org/10.1051/jp4:2006133016>

158. R B Stephens, R.P.J. Snavely, Y. Aglitskii, K U Akli, F Amiranoff, C Andersen, D Batani, S D Baton, T Cowan, R R Freeman, J S Green, H Habara, T Hall, S P Hatchett, D S Hey, J.M. Hill, J.L. Kaae, M H Key, J A King, J A Koch, R Kodama, M Koenig, K Krushelnick, K L Lancaster, A J Mackinnon, E Martinolli, C D Murphy, M Nakatsutsumi, P Norreys, E Perelli-Cippo, M. Rabec Le Gloahec, B. Remington, C Rousseaux, J J Santos, F Scianitti, C Stoeckl, M Tabak, K A Tanaka, W Theobald, R Town, T Yabuuchi, B Zhang
High energy electron transport in solids.
Journal de Physique IV (Proceedings) 06/2006
<https://doi.org/10.1051/jp4:2006133072>
159. N Ozaki, M Koenig, A Benuzzi-Mounaix, T Vinci, A Ravasio, M. Esposito, S Lepape, E Henry, G. Hüser, K A Tanaka, W Nazarov, K Nagai, M Yoshida
Laser-driven flyer impact experiments at the LULI 2000 laser facility.
Journal de Physique IV (Proceedings) 06/2006; 133
<https://doi.org/10.1051/jp4:2006133224>
160. MH Key, K Akli, F. Beg, MH Chen, HK Chung, RR Freeman, ME Foord, JS Green, P Gu, G Gregori, H Habara, SP Hatchett, JM Hill, JA King, R Kodama, JA Koch, K Lancaster, BF Lasinski, B Langdon, AJ MacKinnon, CD Murphy, PA Norreys, N Patel, P Patel, J Pasley, RA Snavely, RB Stephens, C Stoeckl, M Tabak, W Theobald, KA Tanaka, R Town, SC Wilks, T Yabuuchi, B Zhang
Study of electron and proton isochoric heating for fast ignition.
Journal de Physique IV (Proceedings) 06/2006; 133
<https://doi.org/10.1051/jp4:2006133075>
161. H. Nagao, K. G. Nakamura, K. Kondo, N. Ozaki, K. Takamatsu, T. Ono, T. Shiota, D. Ichinose, KA Tanaka, K. Wakabayashi, K. Okada, M. Yoshida, M. Nakai, K. Nagai, K. Shigemori, T. Sakaiya, K. Otani
Hugoniot measurement of diamond under laser shock compression up to 2 TPa.
Physics of Plasmas 05/2006; 13(5):052705-052705-5.
<https://doi.org/10.1063/1.2205194>
162. S P Hatchett, D Clark, M Tabak, R E Turner, C Stoeckel, R B Stephens, H Shiraga, K Tanaka:
Hydrodynamics of Conically-Guided Fast-Ignition Targets.
Fusion Science and Technology 04/2006; 49(3)
<https://doi.org/10.1063/1.1896952>
163. KA Tanaka, R Kodama, PA Norreys
Integral experiments for fast ignition research.
Fusion Science and Technology 04/2006; 49(3)
<https://doi.org/10.13182/FST06-A1153>

164. Z L Chen, G R Kumar, Z M Sheng, T Matsuoka, Y Sentoku, M Tampo, KA Tanaka, T Tsutsumi, T Yabuuchi, R Kodama
Transient Electrostatic Fields and Related Energetic Proton Generation with a Plasma Fiber.
Physical Review Letters 04/2006; 96(8):084802.
<https://doi.org/10.1103/PhysRevLett.96.084802>
165. Kiminori Kondo, Hirohito Maeda, Yoshikazu Hama, Satoshi Morita, Arnaud Zoubir, Ryosuke Kodama, Kazuo A. Tanaka, Yoneyoshi Kitagawa, Yasukazu Izawa
Control of Amplified Optical Parametric Fluorescence in Hybrid Chirped-pulse Amplification.
Journal of the Optical Society of America B 02/2006; 23(2).
<https://doi.org/10.1364/JOSAB.23.000231>
166. Y T Li, Z M Sheng, YY Ma, Z Jin, J Zhang, Z L Chen, R Kodama, T Matsuoka, M Tampo, KA Tanaka, T Tsutsumi, T Yabuuchi, K Du, H Q Zhang, L Zhang, YJ Tang
Demonstration of bulk acceleration of ions in ultraintense laser interactions with low-density foams.
Physical Review E 01/2006; 72(6 Pt 2):066404.
<https://doi.org/10.1103/PhysRevE.72.066404>
167. N. Ozaki, T. Ono, K. Takamatsu, K. A. Tanaka, M. Nakano, T. Kataoka, M. Yoshida, K. Wakabayashi, M. Nakai, K. Nagai, K. Shigemori, T. Yamanaka, K. Kondo
Equation-of-state measurements for polystyrene at multi-TPa pressures in laser direct-drive experiments.
Physics of Plasmas 12/2005; 12(12):124503-124503-4.
<https://doi.org/10.1063/1.2149310>
168. A. Youssef, R. Kodama, H. Habara, KA Tanaka, Y. Sentoku, M. Tampo, Y. Toyama
Broad-range neutron spectra identification in ultraintense laser interactions with carbon-deuterated plasma.
Physics of Plasmas 11/2005; 12(11):110703-110703-4.
<https://doi.org/10.1063/1.2131847>
169. H Nishimura, Y Inubushi, M Ochiai, T Kai, T Kawamura, S Fujioka, M Hashida, S Simizu, S Sakabe, R Kodama, K A Tanaka, S Kato, F Koike, S Nakazaki, H Nagatomo, T Johzaki, K Mima
Study of fast electron transport in hot dense matter using x-ray spectroscopy.
Plasma Physics and Controlled Fusion 11/2005; 47(12B):B823.
<https://doi.org/10.1088/0741-3335/47/12B/S64>
170. J Zhang, Y T Li, Z M Sheng, Y Y Ma, Z Jin, Z L Chen, R Kodama, T Matsuoka, M Tampo, K A Tanaka, T Tsutsumi, T Yabuuchi
Bulk acceleration of ions in intense laser interaction with foams.
Plasma Physics and Controlled Fusion 11/2005; 47(12B):B879.
<https://doi.org/10.1088/0741-3335/47/12B/S70>

171. Keiji Nagai, H. Azechi, F. Ito, A. Iwamoto, Y. Izawa, T. Johzaki, R. Kodama, K. Mima, T. Mito, M. Nakai, N. Nemoto, T. Norimatsu, Y. Ono, K. Shigemori, H. Shiraga, KA Tanaka
Foam materials for cryogenic targets of fast ignition realization experiment (FIREX).
Nuclear Fusion 10/2005; 45(11):1277.
<https://doi.org/10.1088/0029-5515/45/11/008>
m
172. Jian Zheng, C. X. Yu, Z. J. Zheng, KA Tanaka
Cherenkov radiation generated by a beam of electrons revisited.
Physics of Plasmas 09/2005; 12(9):093105-093105-6.
<https://doi.org/10.1063/1.2040178>
173. M. Tabak, D. S. Clark, S. P. Hatchett, M. H. Key, B. F. Lasinski, R. A. Snavely, S. C. Wilks, R. P. J. Town, R. Stephens, E. M. Campbell, R. Kodama, K. Mima, K. A. Tanaka, S. Atzeni, R. Freeman
Review of progress in Fast Ignition.
Physics of Plasmas 05/2005; 12(5):057305-057305-8.
<https://doi.org/10.1063/1.1871246>
174. R. B. Stephens, S. P. Hatchett, M. Tabak, C. Stoeckl, H. Shiraga, S. Fujioka, M. Bonino, A. Nikroo, R. Petrasso, T. C. Sangster, J. Smith, K. A. Tanaka
Implosion hydrodynamics of fast ignition targets.
Physics of Plasmas 05/2005; 12(5):056312-056312-7.
<https://doi.org/10.1063/1.1896952>
175. Z L Chen, R Kodama, M Nakatsutsumi, H Nakamura, M Tampo, KA Tanaka, Y Toyama, T Tsutsumi, T Yabuuchi: *Enhancement of energetic electrons and protons by cone guiding of laser light.*
Physical Review E 04/2005; 71(3 Pt 2B):036403
<https://doi.org/10.1103/PhysRevE.71.036403>
176. R B Campbell, R Kodama, TA Mehlhorn, KA Tanaka, D R Welch: *Simulation of Heating-Compressed Fast-Ignition Cores by Petawatt Laser-Generated Electrons.*
Physical Review Letters 03/2005; 94(5):055001.
<https://doi.org/10.1103/PhysRevLett.94.055001>
177. Yoneyoshi Kitagawa, Yasuhiko Sentoku, Shin Akamatsu, Wataru Sakamoto, Kazuo A Tanaka, Ryosuke Kodama, Hiroaki Nishimura, Yuichi Inubushi, Mitsuo Nakai, Takeshi Watari, Takayoshi Norimatsu, Atsushi Sunahara
Petawatt-laser direct heating of uniformly imploded deuterated-polystyrene shell target.
Physical Review E 02/2005; 71(1 Pt 2):016403.
<https://doi.org/10.1103/PhysRevE.71.016403>
178. N. Miyanaga, H. Azechi, K.A. Tanaka, T. Jitsuno, H. Shiraga, T. Kanabe, R. Kodama, K. Kondo, J. Kawanaka, K. Tsubakimoto, Y. Fujimoto, S. Motokoshi, T. Harimoto, H. Habara, J. Lu, G. Xu, M. Goto, Y. Izawa

Development of High-Energy Laser for FIREX Program.

The Review of Laser Engineering 01/2005; 33(Supplement):55-56

<https://doi.org/10.2184/laj.33.55>

179. Yoneyoshi Kitagawa, Yasuhiko Sentoku, Kazuo A. Tanaka, Ryosuke Kodama, Hiroaki Nishimura, Mitsuo Nakai, Takayoshi Norimatsu, Atsushi Sunahara
Petawatt Laser Direct Heating of Uniformly Imploded CD Shell Target.
Journal of Plasma and Fusion Research 01/2005; 81(5):384-390.
<https://doi.org/10.1585/jspf.81.384>
180. R. Kodama, Y. Sentoku, Z. L. Chen, G. R. Kumar, S. P. Hatchett, Y. Toyama, T. E. Cowan, R. R. Freeman, J. Fuchs, Y. Izawa, M. H. Key, Y. Kitagawa, K. Kondo, T. Matsuoka, H. Nakamura, M. Nakatsutsumi, P. A. Norreys, T. Norimatsu, R. A. Snavely, R. B. Stephens, M. Tampo, K. A. Tanaka, T. Yabuuchi
Plasma devices to guide and collimate a high density of MeV electrons.
Nature 12/2004; 432(7020):1005-1008
<https://doi.org/10.1038/nature03133>
181. Inubushi Yuichi, Nishimura Hiroaki, Matsui Ryoji, Ochiai Masayuki, Kawamura Tohru, Kodama Ryosuke, Tanaka Kazuo, Mima Kunioki, Nagatomo Hideo, Johzaki Tomoyuki, Kitagawa Yoneyoshi, Fujita Hisanori, Jitsuno Takahisa, Miyanaga Noriaki, Norimatsu Tkakayoshi, Nagai Keiji, Izawa Yasukazu
X-Ray Spectroscopic Measurements of Energy Transport in Ultra-Intense Laser Produced Plasma,
J. Plasma Fusion Res. SERIES, Vol. 6 (2004) 337–340
<https://doi.org/10.1063/1.1470290>
182. Kazuo A. Tanaka, Toshinori Yabuuchi, Takashi Sato, Ryosuke Kodama, Yoneyoshi Kitagawa, Teruyoshi Takahashi, Toshiji Ikeda, Yoshihide Honda, Shuuichi Okuda: *Calibration of imaging plate for high energy electron spectrometer.*
Review of Scientific Instruments 12/2004; 76(1):013507-013507-5
<https://doi.org/10.1063/1.1824371>
183. R Kodama, H. Azechi, H Fujita, H Habara, Y Izawa, T. Jitsuno, T. Jozaki, Y Kitagawa, K Krushelnick, T Matsoka, K. Mima, N Miyanaga, K Nagai, H Nagatomo, M Nakai, H Nishimura, T. Norimatsu, PA Norreys, K Shigemori, H Shiraga, A. Sunahara, KA Tanaka, M Tanpo, Y Toyama, K. Tsubakimoto, T Yamanaka, M Zepf: *Fast plasma heating in a cone-attached geometry - Towards fusion ignition.*
Nuclear Fusion 12/2004; 44(12)
<https://doi.org/10.1088/0029-5515/44/12/S19>
184. Kazuo A Tanaka, R Kodama, Y Kitagawa, K Kondo, K Mima, H Azechi, Z Chen, S Fujioka, H Fujita, T Johzaki, A Lei, T Matsuoka, N Miyanaga, K Nagai, H Nagatomo, H Nishimura, T Norimatsu, K Shigemori, H Shiraga, M Tanpo, Y Tohyama, T Yabuuchi, J Zheng, Y Izawa, PA Norreys, R Stephens, S Hatchett: *Progress and perspectives of fast ignition.*
Plasma Physics and Controlled Fusion 11/2004; 46(12B):B41.

<https://doi.org/10.1088/0741-3335/46/12B/004>

185. H. Shiraga, S. Fujioka, PA Jaanimagi, C. Stoeckl, R. B. Stephens, H. Nagatomo, KA Tanaka, R. Kodama, H Azechi
Multi-imaging x-ray streak camera for ultrahigh-speed two-dimensional x-ray imaging of imploded core plasmas (invited).
Review of Scientific Instruments 10/2004; 75(10):3921-3925
<https://doi.org/10.1063/1.1789249>
186. K. Adumi, KA Tanaka, T. Matsuoka, T. Kurahashi, T. Yabuuchi, Y. Kitagawa, R. Kodama, K. Sawai, K. Suzuki, K. Okabe, T. Sera, T. Norimatsu, Y. Izawa
Characterization of preplasma produced by an ultrahigh intensity laser system.
Physics of Plasmas 06/2004; 11(8):3721-3725
<https://doi.org/10.1063/1.1760774>
187. Yoneyoshi Kitagawa, Yasuhiko Sentoku, Shin Akamatsu, Wataru Sakamoto, Ryosuke Kodama, Kazuo A Tanaka, Ken Azumi, Takayoshi Norimatsu, Takeshi Matsuoka, Hisanori Fujita, Hidetsugu Yoshida
Electron Acceleration in an Ultraintense-Laser-Illuminated Capillary.
Physical Review Letters 06/2004; 92(20):205002
<https://doi.org/10.1103/PhysRevLett.92.205002>
188. PA Norreys, K. L. Lancaster, C. D. Murphy, H Habara, S Karsch, R. J. Clarke, J Collier, R Heathcote, C Hernandez-Gomez, S Hawkes, D Neely, MHR Hutchinson, R. G. Evans, M Borghesi, L Romagnani, M Zepf, K Akli, JA King, B Zhang, R. R. Freeman, AJ MacKinnon, S. P. Hatchett, P Patel, R Snavely, M. H. Key, A Nikroo, R Stephens, C Stoeckl, KA Tanaka, T. Norimatsu, Y Toyama, R Kodama
Integrated implosion/heating studies for advanced fast ignition.
Physics of Plasmas 05/2004; 11(5)
<https://doi.org/10.1063/1.1688790>
189. Jian Zheng, KA Tanaka, T Sato, T Yabuuchi, T Kurahashi, Y Kitagawa, R Kodama, T Norimatsu, T Yamanaka
Study of Hot Electrons by Measurement of Optical Emission from the Rear Surface of a Metallic Foil Irradiated with Ultraintense Laser Pulse.
Physical Review Letters 05/2004; 92(16):165001
<https://doi.org/10.1103/PhysRevLett.92.165001>
190. H Habara, R Kodama, Y Sentoku, N Izumi, Y Kitagawa, KA Tanaka, K Mima, T Yamanaka
Fast ion acceleration in ultraintense laser interactions with an overdense plasma.
Physical Review E 04/2004; 69(3 Pt 2):036407
<https://doi.org/10.1103/PhysRevE.69.036407>
191. Y T Li, J Zhang, Z M Sheng, J Zheng, Z L Chen, R Kodama, T Matsuoka, M Tampo, KA Tanaka, T Tsutsumi, T Yabuuchi

High-energy electrons produced in subpicosecond laser-plasma interactions from subrelativistic laser intensities to relativistic intensities.

Physical Review E 04/2004; 69(3 Pt 2):036405

<https://doi.org/10.1103/PhysRevE.69.036405>

192. N. Ozaki, K. A. Tanaka, T. Ono, K. Shigemori, M. Nakai, H. Azechi, T. Yamanaka, K. Wakabayashi, M. Yoshida, H. Nagao, K. Kondo
GEKKO/HIPER-driven shock waves and equation-of-state measurements at ultrahigh pressures.
Phys Plasmas 11:1600. Physics of Plasmas 03/2004; 11(4):1600-1608
<https://doi.org/10.1063/1.1650845>
193. Yoshiaki Yamauchi, Motohiro Nakano, Norimasa Ozaki, Kazuo A. Tanaka
Fracture of CFRP under Hyper-Velocity Impact Using Laser-Accelerated Flyer.
Journal of the Society of Materials Science Japan 03/2004; 53(3):254-259.
<https://doi.org/10.2472/jsms.53.254>
194. Takatoshi Ono, Kazuo A. Tanaka, Norimasa Ozaki
Study of Equation of State Using Laser-Induced Shock-Wave Compression 3. Equation-of-State Measurements by Laser-Induced Shock Compression 3.2. Equation-of-State Measurements for InertialFusion Pellet Materials.
Journal of Plasma and Fusion Research 01/2004; 80:442-446
<https://doi.org/10.1585/jspf.80.442>
195. Norimasa Ozaki, Kazuo A. Tanaka, Takatoshi Ono, Kikuo Takamatsu, Keiji Nagai, Keisuke Shigemori, Mitsuo Nakai, Noriaki Miyana, Hiroshi Azechi, Tatsuhiko Yamanaka:
Characterization of GEKKO/HIPER-Driven Shock Waves for Equation-of-State Experiments in Ultra-High-Pressure Regime.
Journal of Plasma and Fusion Research 01/2004; 80(6):486-491.
<https://doi.org/10.1585/jspf.80.486>
196. Takatoshi Ono, Kazuo A. Tanaka, Norimasa Ozaki, Takeshi Shiota, Keiji Nagai, Keisuke Shigemori, Motohiro Nakano, Toshihiko Kataoka
Simultaneous Measurement of Temperature, Pressure and Shock-Wave Velocity of Compressed Polystyrene.
Journal of Plasma and Fusion Research 01/2004; 80(6):476-481.
<https://doi.org/10.1585/jspf.80.476>
197. Norimasa Ozaki, Kazuo A. Tanaka: *Study of Equation of State Using Laser-Induced Shock-Wave Compression 2. Laser-Driven Equation-of-State Measurements.*
Journal of Plasma and Fusion Research 01/2004; 80:432-437
<https://doi.org/10.1585/jspf.80.432>
198. Ken Okada, Kunihiro Wakabayashi, Hisataka Takenaka, Hirofumi Nagao, Ken-ichi Kondo, Takatoshi Ono, Kikuo Takamatsu, Norimasa Ozaki, Keiji Nagai, Mitsuo Nakai, Kazuo A. Tanaka, Masatake Yoshida

Experimental technique for launching miniature flying plates using laser pulses. International Journal of Impact Engineering 12/2003; 29(1):497-502.
<https://doi.org/10.1016/j.ijimpeng.2003.09.045>

199. R B Stephens, S P Hatchett, R E Turner, KA Tanaka, R Kodama
Implosion of Indirectly Driven Reentrant-Cone Shell Target.
Physical Review Letters 11/2003; 91(18):185001
<https://doi.org/10.1103/PhysRevLett.91.185001>
200. Yoneyoshi Kitagawa, Shin Akamatsu, Wataru Sakamoto, Kazuo Tanaka, Ryosuke Kodama, Hiroaki Nishimura, Hisanori Fujita, Takayoshi Norimatsu, Atsushi Sunahara, Yasuhiko Sentoku:
Petawatt laser direct heating of imploded plasmas and thermal neutron enhancement,
Pacific Rim Conference on Lasers and Electro-Optics, CLEO – Technical Digest, vol. 1, p. I70-I71, 2001.
201. Norimasa Ozaki, Kazuo A. Tanaka, Takatoshi Ono, Keisuke Shigemori, Mitsuo Nakai, Hiroshi Azechi, Tatsuhiko Yamanaka, Kunihiro Wakabayashi, Masatake Yoshida, Hirofumi Nagao, Ken-Ichi Kondo
GEKKO/HIPER laser driven shock waves and equation-of-state experiments,
Journal of Plasma and Fusion Research. 80(6) P.486-P.491
<https://doi.org/10.1585/jspf.80.486>
202. H Habara, R Kodama, Y Setoku, N Izumi, Y Kitagawa, KA Tanaka, M Mima, T Yamanaka:
Momentum distribution of accelerated ions in ultra-intense laser-plasma interactions via neutron spectroscopy. Physics of Plasmas 09/2003; 10(9)
<https://doi.org/10.1063/1.1593650>
203. Jian Zheng, KA Tanaka, T. Miyakoshi, Y. Kitagawa, R. Kodama, T. Kurahashi, T. Yamanaka
Theoretical study of transition radiation from hot electrons generated in the laser–solid interaction.
Physics of Plasmas 06/2003; 10(7):2994-3003
<https://doi.org/10.1063/1.1576388>
204. K Takamatsu, N Ozaki, KA Tanaka, T Ono, K Nagai, M Nakai, T Watari, A Sunahara, M Nakano, T Kataoka, H Takenaka, M Yoshida, K Kondo, T Yamanaka
Equation-of-state measurements of polyimide at pressures up to 5.8 TPa using low-density foam with laser-driven shock waves.
Physical Review E 06/2003; 67(5 Pt 2):056406
<https://doi.org/10.1103/PhysRevE.67.056406>
205. N. Ozaki, KA Tanaka, Y. Sasatani, K. Fujita, K. Takamatsu, M. Nakano, M. Yoshida, K. Okada, E. Takahashi, Y. Owadano, H. Takenaka, K. Kondo
Hugoniot measurements for polyimide with laser and explosives.
Physics of Plasmas 05/2003; 10(6):2475-2479
<https://doi.org/10.1063/1.1572490>

206. KA Tanaka, R. Kodama, K. Mima, Y. Kitagawa, H. Fujita, N. Miyanaga, K. Nagai, T. Norimatsu, T. Sato, Y. Sentoku, K. Shigemori, A. Sunahara, T. Shozaki, M. Tanpo, S. Tohyama, T. Yabuuchi, J. Zheng, T. Yamanaka, PA Norreys, R. Evanse, M. Zepf, K. Krushelnic, A. Dangor, R. Stephens, S. Hatchett, M. Tabak, R. Turner
Basic and integrated studies for fast ignition.
Physics of Plasmas 04/2003; 10(5):1925-1930
<https://doi.org/10.1063/1.1567722>
207. Shinsuke Fujioka, Hiroyuki Shiraga, Masaharu Nishikino, Yohei Tamari, Keisuke Shigemori, Mitsuo Nakai, Hiroshi Azechi, Kazuo A. Tanaka, Tatsuhiko Yamanaka
Side-on measurement of hydrodynamics of laser-driven plasmas with high space- and time-resolution x-ray imaging technique. Review of Scientific Instruments 02/2003; 74(3):2198-2201
<https://doi.org/10.1063/1.1537852>
208. Motohiro Nakano, Yoshiaki Yamauchi, Norimasa Ozaki, Kazuo A. Tanaka
Simulation of Orbital Debris Impact Using Laser Accelerated Three-Layered Flyer.
Journal of the Japan Society for Aeronautical and Space Sciences 51(599), 690-696, 2003-12-05.
<https://doi.org/10.2322/jjsass.51.690>
209. Yoneyoshi Kitagawa, Yasuhiko Sentoku, Michiaki Mori, Hisaoki Asatsu, Shin Akamatsu, Ryosuke Kodama, Kazuo Tanaka
Growth and Saturation of Large Amplitude Self-Modulated Wakefield in 60 TW Laser Plasma and Possible Electron Acceleration.
AIP Conference Proceedings; ISSN 0094-243X; v. 647(1); p. 634-645 12/2002;
<https://doi.org/10.1063/1.1524918>
210. R Kodama, KA Tanaka, S Fujioka, H Fujita, H Habara, Y Izawa, T. Jitsuno, Y Kitagawa, K Krushelnick, K. Mima, N Miyanaga, K Nagai, P Norreys, T. Norimatsu, K Shigemori, H Shiraga, Y Toyama, M Zepf, T Yamanaka
Fast heating of super-solid density plasmas towards laser fusion ignition.
Plasma Physics and Controlled Fusion 11/2002; 44(12B).
<https://doi.org/10.1088/0741-3335/44/12B/309>
211. Keiji Nagai, Takayoshi Norimatsu, Tatsuhiko Yamanaka, Tsutomu Nishibe, Norimasa Ozaki, Kikuo Takamatsu, Takatoshi Ono, Motohiro Nakano, Kazuo A. Tanaka
Single Molecular Membrane Glue Technique for Laser Driven Shock Experiments.
Japanese Journal of Applied Physics 10/2002; 41(Part 2):L1184-L1186.
<https://doi.org/10.1143/JJAP.41.L1184>
212. R. Kodama, H. Shiraga, K. Shigemori, Y. Toyama, S. Fujioka, H. Azechi, H. Fujita, H. Habara, T. Hall, Y. Izawa, T. Jitsuno, Y. Kitagawa, K. M. Krushelnick, K. L. Lancaster, K. Mima, K. Nagai, M. Nakai, H. Nishimura, T. Norimatsu, P. A. Norreys, S. Sakabe, K. A. Tanaka, A. Youssef, M. Zepf, T. Yamanaka
Nuclear fusion: Fast heating scalable to laser fusion ignition.
Nature 08/2002; 418(6901):933-934

<https://doi.org/10.1038/418933a>

213. T. Miyakoshi, M. S. Jovanović, Y. Kitagawa, R. Kodama, K. Mima, A. A. Offenberger, K. A. Tanaka, T. Yamanaka
Stimulated Raman back-scattering from a mm-scale inhomogeneous plasma irradiated with ultra-intense laser pulse.
Physics of Plasmas 07/2002; 9(8):3552-3557
<https://doi.org/10.1063/1.1491252>
214. Jian Zheng, K. A. Tanaka, T. Miyakoshi, Y. Kitagawa, R. Kodama, T. Kurahashi, T. Yamanaka
Spectrum of transition radiation from hot electrons generated in ultra-intense laser plasma interaction. Physics of Plasmas 07/2002; 9(8):3610-3616
<https://doi.org/10.1063/1.1491413>
215. Jian Zheng, KA Tanaka, Y. Sentoku, AA Offenberger, Y. Kitagawa, R. Kodama, T. Kurahashi, K. Mima, T. Yamanaka
Harmonic emission with cyclotron satellite structure due to strong magnetic fields produced by ultra-intense laser-plasma interaction.
Physics of Plasmas 07/2002; 9(8):3193-3196
<https://doi.org/10.1063/1.1493206>
216. Y. Kitagawa, Y. Sentoku, S. Akamatsu, M. Mori, Y. Tohyama, R. Kodama, KA Tanaka, H. Fujita, H. Yoshida, S. Matsuo, T. Jitsuno, T. Kawasaki, S. Sakabe, H. Nishimura, Y. Izawa, K. Mima, T. Yamanaka
Progress of fast ignitor studies and Petawatt laser construction at Osaka University.
Physics of Plasmas 04/2002; 9(5):2202-2207
<https://doi.org/10.1063/1.1458588>
217. N Izumi, Y Sentoku, H Habara, K Takahashi, F Ohtani, T Sonomoto, R Kodama, T Norimatsu, H Fujita, Y Kitagawa, K Mima, KA Tanaka, T Yamanaka
Observation of neutron spectrum produced by fast deuterons via ultraintense laser plasma interactions.
Physical Review E 04/2002; 65(3 Pt 2B):036413
<https://doi.org/10.1103/PhysRevE.65.036413>
218. Yoshiaki Yamauchi, Motohiro Nakano, Keizo Kishida, Norimasa Ozaki, Takao Kasai, Yasufumi Sasatani, Hidehiko Amaki, Kazuo A. Tanaka
Deformation and Fracture of CFRP under HyperVelocity Impact Test Using Laser-Accelerated Flyer.
Journal Japan Society For Aeronautical And Space Sciences, 01/2002; 49(571):262-267.
<https://doi.org/10.2322/jjsass.49.262>
219. Ryosuke Kodama, Kunioki Mima, Yasukazu Izawa, Kazuo A. Tanaka, Yoneyoshi Kitagawa, Noriaki Miyanaga, Hisanori Fujita, Takayoshi Norimatsu, Hiroaki Nishimura, Keisuke Shigemori, Yasuhiko Sentoku, Tatsuhiko Yamanaka

Progress of Advanced Fusion Energy Studies with Ultra-Intense Lasers

Journal of Plasma and Fusion Research 01/2002; 78(8):792-798.

<https://doi.org/10.1585/jspf.78.792>

220. Yoneyoshi Kitagawa, Ryosuke Kodama, Kazuo A. Tanaka, Yusuke Tohyama, Shin Akamatsu, Yasuhiko Sentoku, Hisanori Fujita, Takahisa Jitsuno, Hiroaki Nishimura, Shuji Sakabe, Yasukazu Izawa, Kunioki Mima

Neutron enhancement and related recent studies on the fast ignitor at ILE Osaka University.

Proceedings of SPIE - The International Society for Optical Engineering 12/2001; 4510.

<https://doi.org/10.1117/12.451285>

221. T. Kadono, M. Yoshida, N.K. MITANI, T. Matsumura, E. Takahashi, I. Matsushima, Y. Owadano, Y. Sasatani, K. Fujita, N. Ozaki, K. Takamatsu, M. Nakano, K.A. TANAKA, H. Takenaka, H. Ito, K. Kondo

Flyer acceleration experiments using a KrF laser system with a long pulse duration and pressure and thickness of isobaric zone induced in impacted materials.

Laser and Particle Beams 10/2001; 19(04):623-630

<https://doi.org/10.1017/S0263034601194097>

222. R Kodama, P A Norreys, K Mima, A E Dangor, R G Evans, H Fujita, Y Kitagawa, K Krushelnick, T Miyakoshi, N Miyanaga, T Norimatsu, S J Rose, T Shozaki, K Shigemori, A Sunahara, M Tambo, K A Tanaka, Y Toyama, T Yamanaka, M Zepf

Fast heating of ultrahigh-density plasma as a step towards laser fusion ignition. Nature 412:798.

Nature 09/2001; 412(6849):798-802

<https://doi.org/10.1038/35090525>

223. Yoshihiro Murakami, Yoneyoshi Kitagawa, Yasuhiko Sentoku, Michiaki Mori, Ryosuke Kodama, Kazuo A. Tanaka, Kunioki Mima, Tatsuhiko Yamanaka: *Murakami, Y. et al. Observation of proton rear emission and possible gigagauss scale magnetic fields from ultra-intense laser illuminated plastic target. Phys. Plasmas 8, 4138-4143.*

Physics of Plasmas 08/2001; 8(9):4138-4143

<https://doi.org/10.1063/1.1390333>

224. R. Kodama, K. Mima, KA Tanaka, Y. Kitagawa, H. Fujita, K. Takahashi, A. Sunahara, K. Fujita, H. Habara, T. Jitsuno, Y. Sentoku, T. Matsushita, T. Miyakoshi, N. Miyanaga, T. Norimatsu, H. Setoguchi, T. Sonomoto, M. Tanpo, Y. Toyama, T. Yamanaka

Fast ignitor research at the Institute of Laser Engineering, Osaka University.

Physics of Plasmas 04/2001; 8(5):2268-2274

<https://doi.org/10.1063/1.1352598>

225. Katsumasa Fujita, A. Sunahara, Kazuo A. Tanaka, Nobuhiko Izumi, Takahisa Jitsuno, Noriaki Miyanaga, Takeshi Miyakoshi, H. Otani, Mitsuhiro Fukao, Manabu Heya, Yoshihiro Ochi, Yoneyoshi Kitagawa, Ryosuke Kodama, Kunioki Mima, Hiroaki Nishimura, Takayoshi Norimatsu, Yasuhiko Sentoku, Hideaki Takabe, Tatsuhiko Yamanaka

Model experiments of fast ignition with coaxial high-power laser beams.

Proceedings of SPIE - The International Society for Optical Engineering 04/2001; 4424:37-44

<https://doi.org/10.1117/12.425618>

226. Il Woo Choi, Hiroyuki Daido, Noriyuki Sakaya, Yusuke Tohyama, Nobuhiko Izumi, Ryosuke Kodama, Yoneyoshi Kitagawa, Kazuo A. Tanaka, Kunioki Mima
Prepulse Effect for Recombining Plasma Produced by Ultrashort High-Intensity Lasers.
Japanese Journal of Applied Physics 03/2001; 40(3A):1443-1447
<https://doi.org/10.1143/JJAP.40.1443>
227. N. Ozaki, Y. Sasatani, K. Kishida, M. Nakano, M. Miyanaga, K. Nagai, K. Nishihara, T. Norimatsu, KA Tanaka, Y. Fujimoto, K. Wakabayashi, S. Hattori, T. Tange, K. Kondo, M. Yoshida, N. Kozu, M. Ishiguchi, H. Takenaka
Planar shock wave generated by uniform irradiation from two overlapped partially coherent laser beams.
Journal of Applied Physics 02/2001; 89(5):2571-2575
<https://doi.org/10.1063/1.1342189>
228. T Tschudi, C Yamanaka, T Sasaki, K Yoshida, K Tanaka
A study of high-power laser effects in dielectrics using multiframe picosecond holography.
Journal of Physics D Applied Physics 01/2001; 11(2):177
<https://doi.org/10.1088/0022-3727/11/2/015>
229. K. A. Tanaka, R. Kodama, Y. Kitagawa, K. Mima, Y. Sentoku, T. Yamanaka
Fast ignitor related studies at ILE, Osaka University.
Electroencephalography and Clinical Neurophysiology/Electromyography and Motor Control 01/2001
<https://doi.org/10.1109/PPPS.2001.961420>
230. KA Tanaka, M. M. Allen, A Pukhov, R Kodama, H Fujita, Y Kato, T Kawasaki, Y Kitagawa, K Mima, N Morio, H Shiraga, M Iwata, T Miyakoshi, T Yamanaka
Evidence of relativistic laser beam filamentation in back-reflected images.
Physical review. E, 09/2000; 62(2 Pt B):2672-7
<https://doi.org/10.1103/PhysRevE.62.2672>
231. T. Kadono, M. Yoshida, E. Takahashi, I. Matsushima, Y. Owadano, N. Ozaki, K. Fujita, M. Nakano, KA Tanaka, H. Takenaka, K. Kondo
Flyer acceleration by a high-power KrF laser with a long pulse duration.
Journal of Applied Physics 08/2000; 88(5):2943-2947
<https://doi.org/10.1063/1.1287219>
232. K.A. Tanaka, R Kodama, N Izumi, K Takahashi, M Heya, H Fujita, Y Kato, Y Kitagawa, K Mima, N Miyanaga, T Norimatsu, Y Sentoku, A Sunahara, H Takabe, T Yamanaka, T Koase, T Iwatani, F Ohtani, T Miyakoshi, H Habara, M Tanpo, S Tohyama, F.A. Weber, TW Barbee, L.B. Dasilva
Self-focusing and its related interactions at very high laser intensities for fast ignition at Osaka University.

Comptes Rendus de l'Académie des Sciences - Series IV - Physics 08/2000; 1(6-6):737-744.
[https://doi.org/10.1016/S1296-2147\(00\)01079-9](https://doi.org/10.1016/S1296-2147(00)01079-9)

233. K Mima, S Nakai, H Azechi, A Nishiguchi, H Takabe, N Miyanga, H Nakano, M Nakai, M Katayama, K Nishihara, N Nakatsuka, T Jitsuno, K Tanaka, H Nishimura, H Shiraga, T Endo, T Yamanaka, Y Kato, C Yamanaka
Physics highlights of the Gekko12 program.
Plasma Physics and Controlled Fusion 07/2000; 34(13):1775.
<https://doi.org/10.1088/0741-3335/34/13/005>
234. KA Tanaka, R Kodama, H Fujita, M Heya, N Izumi, Y Kato, Y Kitagawa, K Mima, N Miyanaga, T Norimatsu, A Pukhov, A Sunahara, K Takahashi, M Allen, H Habara, T Iwatani, T Matusita, T Miyakoshi, M Mori, H Setoguchi, T Sonomoto, M Tanpo, S Tohyama, H Azuma, T Kawasaki, T Komeno, O Maekawa, S Matsuo, T Shozaki, Ka Suzuki, H Yoshida, T Yamanaka, Y Sentoku, F Weber, T. W. Barbee, L DaSilva
Studies of ultra-intense laser plasma interactions for fast ignition.
Physics of Plasmas 05/2000; 7(5-5):2014-2022
<https://doi.org/10.1063/1.874023>
235. Kunihiro Wakabayashi, Shyuhei Hattori, Tomoyuki Tange, Yasushi Fujimoto, Masatake Yoshida, Naoshi Kozu, Kazuo A. Tanaka, Norimasa Ozaki, Yasufumi Sasatani, Hisataka Takenaka, Kazutaka G. Nakamura, Ken-ichi Kondo
Laser-Induced Shock Compression of Tantalum to 1.7 TPa.
Japanese Journal of Applied Physics 04/2000; 39(4A):1815-1816
<https://doi.org/10.1143/JJAP.39.1815>
236. K Takahashi, R Kodama, KA Tanaka, H Hashimoto, Y Kato, K Mima, FA Weber, T. W. Barbee, Da Silva LB
Laser-Hole Boring into Overdense Plasmas Measured with Soft X-Ray Laser Probing.
Physical Review Letters 03/2000; 84(11):2405-8
<https://doi.org/10.1103/PhysRevLett.84.2405>
237. R Kodama, KA Tanaka, Y Sentoku, T Matsushita, K Takahashi, H Fujita, Y Kitagawa, Y Kato, T Yamanaka, K Mima
Long-Scale Jet Formation with Specularly Reflected Light in Ultraintense Laser-Plasma Interactions.
Physical Review Letters 02/2000; 84(4):674-7
<https://doi.org/10.1103/PhysRevLett.84.674>
238. Kazuo A. Tanaka, Motohiko Hara, Norimasa Ozaki, Yasufumi Sasatani, Sergei I. Anisimov, Ken-ichi Kondo, Motohiro Nakano, Katsunobu Nishihara, Hisataka Takenaka, Masatake Yoshida, Kunioki Mima
Multi-layered flyer accelerated by laser induced shock waves.
Physics of Plasmas 01/2000; 7(2):676-680
<https://doi.org/10.1063/1.873851>

239. Hideaki Habara, Ryosuke Kodama, Yasuhiko Sentoku, Yoneyoshi Kitagawa, Kazuo A. Tanaka, Kunioki Mima, Tatsuhiko Yamanaka: *Fast ion generation in ultra-intense laser interactions with plasmas*. Proceedings of SPIE - The International Society for Optical Engineering 01/2000; <https://doi.org/10.1117/12.375147>
240. Yoneyoshi Kitagawa, Michiaki Mori, Yoshihiro Murakami, Ryosuke Kodama, Hideaki Habara, Kiyonobu Sawai, Kenji Suzuki, Tetsuji Kawasaki, Kazuo A. Tanaka, Kunioki Mima: *Self-modulated wakefield excitation in 40TW laser-plasma and electron acceleration*. Proceedings of SPIE - The International Society for Optical Engineering 01/2000; <https://doi.org/10.1117/12.375098>
241. Takeshi Miyakoshi, Kazuo A. Tanaka, Ryosuke Kodama, Kunioki Mima, Tatsuhiko Yamanaka, Yoneyoshi Kitagawa, Hisanori Fujita, Noriaki Miyanaga, Takayoshi Norimatsu, Tetsuji Kawasaki, Nobuhiko Izumi, J. Sunahara: *Ultra-intense laser propagation with measurement of backscattered light image and spectrum*. Proceedings of SPIE - The International Society for Optical Engineering 01/2000; <https://doi.org/10.1117/12.375146>
242. KA Tanaka, H Hashimoto, R Kodama, K Mima, Y Sentoku, K Takahashi: *Performance comparison of self-focusing with 1053- and 351-nm laser pulses*. Physical review. E, Statistical physics, plasmas, fluids, and related interdisciplinary topics 10/1999; 60(3):3283-8 <https://doi.org/10.1103/PhysRevE.60.3283>
243. Y. Sentoku, H. Ruhl, K. Mima, R. Kodama, K. A. Tanaka, Y. Kishimoto: *Plasma jet formation and magnetic-field generation in the intense laser Dlasma under oblique incidence*. Physics of Plasmas 06/1999; 6(7):2855-2861 <https://doi.org/10.1063/1.873243>
244. Yoneyoshi Kitagawa, Ryosuke Kodama, Kenjiro Takahashi, Michiaki Mori, Manabu Iwata, Saiji Tuji, Kenji Suzuki, Kiyonobu Sawai, Kazuyuki Hamada, Kazuo Tanaka, Hisanori Fujita, Tadashi Kanabe: *30TW laser-plasma interactions at ILE, Osaka*. Fusion Engineering and Design 02/1999; 44(1):261-265 [https://doi.org/10.1016/S0920-3796\(98\)00304-4](https://doi.org/10.1016/S0920-3796(98)00304-4)
245. Kazuo A. Tanaka, Ryosuke Kodama, Tatsuhiko Yamanaka, Hisanori Fujita, Tadashi Kanabe, Yoneyoshi Kitagawa, Yoshiaki Kato, Yasuhiko Sentoku, Nobuhiko Izumi, Kenjiro Takahashi, Tatsuya Sonomoto, Tomohiro Matusita: *Fast Ignitor Research with Use of Ultra-Intense Laser System*. Journal of Plasma and Fusion Research 01/1999; 75(4):452-458 <https://doi.org/10.1585/jspf.75.452>

246. R. Kodama, K. Takahashi, K. A. Tanaka, Y. Kato, K. Murai, F. Weber, T. W. Barbee, L. B. DaSilva
Measurements of laser-hole boring into overdense plasmas using x-ray laser refractometry (invited). Review of Scientific Instruments 12/1998; 70(1):543-548.
<https://doi.org/10.1063/1.1149380>
247. H. Nishimura, H. Azechi, H. Shiraga, M. Nakai, N. Miyanaga, H. Takabe, T. Norimastu, H. Fujita, K. Shigemori, M. Heya, S. Izumi, H. Honda, K. Fujita, A. Sunahara, M. Honda, T. Kanabe, T. Jitsuno, M. Takagi, R. Kodama, K. A. Tanaka, M. Nakatsuka, K. Nishihara, Y. Kato, T. Yamanaka, S. Nakai, K. Mima
High-convergence uniform implosion of fusion pellets with the new GEKKO laser.
Plasma Physics and Controlled Fusion 12/1998; 39(5A):A401
<https://doi.org/10.1088/0741-3335/39/5A/037>
248. Y. Kato, Y. Kitagawa, K. A. Tanaka, R. Kodama, H. Fujita, T. Kanabe, T. Jitsuno, H. Shiraga, H. Takabe, M. Murakami, K. Nishihara, K. Mima
Fast ignition and related plasma physics issues with high-intensity lasers.
Plasma Physics and Controlled Fusion 12/1998; 39(5A):A145
<https://doi.org/10.1088/0741-3335/39/5A/015>
249. R. Kodama, K. A. Tanaka, T. Yamanaka, Y. Kato, Y. Kitagawa, H. Fujita, T. Kanabe, N. Izumi, K. Takahashi, H. Habara, K. Okada, M. Iwata, T. Matsushita, K. Mima
Studies of intense laser-plasma interactions for the fast ignitor concept at ILE, Osaka University.
Plasma Physics and Controlled Fusion 12/1998; 41(3A):A419
<https://doi.org/10.1088/0741-3335/41/3A/034>
250. Kazuo A. Tanaka, R. Kodama, K. Mima, Y. Kitagawa, T. Yamanaka, N. Izumi
Recent progress of fast ignition research at Institute of Laser Engineering, Osaka University.
Fusion Technology 11/1998; 34(3):336-341
<https://doi.org/10.13182/FST98-A11963637>
251. N. Izumi, K. Miyoshi, K. Takahashi, H. Habara, R. Kodama, S. Sentoku, H. Fujita, Y. Kitagawa, Y. Katou, K. Mima, K. A. Tanaka
Observation of neutron spectrum from deuterated plastic irradiated by 100 picosecond and sub-picosecond ultra-intense laser,
Physical Review E 65(3 Pt 2B):036413(2002)
<https://doi.org/10.1103/PhysRevE.65.036413>
252. H. Ruhl, Y. Sentoku, K. Mima, K. A. Tanaka, R. Kodama
Collimated Electron Jets by Intense Laser-Beam-Plasma Surface Interaction under Oblique Incidence.
Physical Review Letters 07/1998; 82(4)
<https://doi.org/10.1103/PhysRevLett.82.743>

253. Michiaki Mori, Yoneyoshi Kitagawa, Ryosuke Kodama, Hideaki Habara, Manabu Iwata, Saiji Tsuji, Kenji Suzuki, Kiyonobu Sawai, Kazuo Tanaka, Yoshiaki Kato, Kunioki Mima
Ultra intense glass laser system and laser-plasma interactions.
Nuclear Instruments and Methods in Physics Research Section A Accelerators Spectrometers Detectors and Associated Equipment 06/1998; 410(3):367-372
[https://doi.org/10.1016/S0168-9002\(98\)00151-X](https://doi.org/10.1016/S0168-9002(98)00151-X)
254. Xin-Zen Li, M. Nakano, Y. Yamauchi, K. Kishida, KA Tanaka: *Microcracks, spall and fracture in glass: A study using short pulsed laser shock waves.*
Journal of Applied Physics 03/1998; 83(7):3583-3594
<https://doi.org/10.1063/1.366575>
255. Kenjiro Takahashi, Ryosuke Kodama, Kazuo A. Tanaka, Hiroyuki Hashimoto, Yoshiaki Kato, Kunioki Mima, Kensuke Murai, Franz A. Weber, Troy W. Barbee, Peter M. Celliers, Luiz B. da Silva
XUV laser grid image refractometry applied in laser hole boring experiments.
Proceedings of SPIE - The International Society for Optical Engineering 11/1997; 3156.
<https://doi.org/10.1117/12.279407>
256. Franz A. Weber, Troy W. Barbee, Peter M. Celliers, Luiz B. da Silva, Kazuo A. Tanaka, Ryosuke Kodama, Kenjiro Takahashi
Soft x-ray laser based Moiré deflectometry of dense plasmas.
Proceedings of SPIE - The International Society for Optical Engineering 10/1997; 3156:154-162.
<https://doi.org/10.1117/12.293377>
257. Sadao Nakai, Hiroyuki Daido, Hiroaki Nishimura, Kazuo A. Tanaka, Takayoshi Norimatsu, Masanobu Yamanaka, Guan-Ming Zeng, Kunio Shinohara, Hideaki Takabe, Masahiro Nakatsuka, Yoshiaki Kato, Yasukazu Izawa
X-ray generation by lasers and its application at ILE Osaka University.
Proceedings of SPIE - The International Society for Optical Engineering 10/1997;
<https://doi.org/10.1117/12.283989>
258. Kenjiro Takahashi, Ryosuke Kodama, Masahiro Tsukamoto, Kazuo A Tanaka, Hiroyuki Hashimoto, Yosiaki Kato, Kunioki Mima
Study of laser channeling into an overdense plasma.
Optics Communications 02/1997; 135(1):45-48
[https://doi.org/10.1016/S0030-4018\(96\)00597-4](https://doi.org/10.1016/S0030-4018(96)00597-4)
259. R Kodama, K Takahashi, KA Tanaka, M Tsukamoto, H Hashimoto, Y Kato, K Mima
Study of Laser-Hole Boring into Overdense Plasmas.
Physical Review Letters 01/1997; 77(24):4906-4909
<https://doi.org/10.1103/PhysRevLett.77.4906>
260. Kenjiro Takahashi, Ryosuke Kodama, Masahiro Tsukamoto, Kazuo Tanaka, Yosiaki Kato, Kunioki Mima

Scattered light measurements of high intensity laser plasma interaction above 10¹⁷W/cm².
Progress in Crystal Growth and Characterization of Materials 12/1996; 33(1):273-276.
[https://doi.org/10.1016/0960-8974\(96\)83655-2](https://doi.org/10.1016/0960-8974(96)83655-2)

261. K. Mima, Y. Kato, H. Azechi, K. Shigemori, H. Takabe, N. Miyanaga, T. Kanabe, T. Norimatsu, H. Nishimura, H. Shiraga, M. Nakai, R. Kodama, KA Tanaka, M. Takagi, M. Natatsuka, K. Nishihara, T. Yamanaka, S. Nakai
Recent progress of implosion experiments with uniformity-improved GEKKO XII laser facility at the Institute of Laser Engineering, Osaka University.
Physics of Plasmas 04/1996; 3(5):2077-2083
<https://doi.org/10.1063/1.872005>
262. D Vick, M Kado, H Yamamoto, KA Tanaka, AA Offenberger, C. E. Capjack, A Nishiguchi, K Mima, S Nakai
Lateral energy transport in laser-produced plasmas.
Physical review. E, Statistical physics, plasmas, fluids, and related interdisciplinary topics 01/1996; 52(6):6692-6702
<https://doi.org/10.1103/PhysRevE.52.6692>
263. Y Kitagawa, KA Tanaka, M Nakai, T Yamanaka, K Nishihara, H Azechi, N Miyanaga, T Norimatsu, T Kanabe, C Chen, A Richard, M Sato, H Furukawa, S Nakai
Areal Density Measurement of Imploded Cryogenic Target by Energy Peak Shift of DD-Produced Protons.
Physical Review Letters 11/1995; 75(17):3130-3133
<https://doi.org/10.1103/PhysRevLett.75.3130>
264. T Endo, K Shigemori, H Azechi, A Nishiguchi, K Mima, M Sato, M Nakai, S Nakaji, N Miyanaga, S Matsuoka, A Ando, KA Tanaka, S Nakai
Dynamic Behavior of Rippled Shock Waves and Subsequently Induced Areal-Density-Perturbation Growth in Laser-Irradiated Foils.
Physical Review Letters 06/1995; 74(18):3608-3611
<https://doi.org/10.1103/PhysRevLett.74.3608>
265. Kazuo A. Tanaka, Tatsuhiko Yamanaka, Katsunobu Nishihara, Takayoshi Norimatsu, Noriaki Miyanaga, Hiroyuki Shiraga, Mitsuo Nakai, Yoneyoshi Kitagawa, Ryosuke Kodama, Tadashi Kanabe, Hiroshi Azechi, Manabu Heya, Takahisa Jitsuno, Masataka Kado, Kunioki Mima, Masahiro Nakatsuka, Akio Nishiguchi, Hideaki Takabe, Masaru Takagi, Kouji Tsubakimoto, Masahiro Tsukamoto, Yoshiaki Kato, Yasukazu Izawa, Sadao Nakai
Cryogenic deuterium target experiments with the GEKKO XII, green laser system.
Physics of Plasmas 05/1995; 2(6):2495-2503
<https://doi.org/10.1063/1.871211>
266. H Daido, M S Schulz, K Murai, R Kodama, G Yuan, J Goto, K A Tanaka, Y Kato, S Nakai, K Shinohara, T Honda, I Kodama, H Iwasaki, T Yoshinobu, M Tsukamoto, M Niibe, Y Fukuda, D Neely, A Macphree, G Slark
Subnanosecond In-Line Soft X-Ray Holography Using Germanium Laser in the 20 nm Wavelength

Region.. Journal of X-Ray Science and Technology 03/1995; 5(1):105-20.
<https://doi.org/10.3233/XST-1995-5109>

267. M. Tsukamoto, K. A. Tanaka, K. Mima, M. Kado, S. Miyamoto, M. Nakai, T. Norimatsu, M. Takagi, K. Nishihara, T. Yamanaka, S. Nakai, A. Nishiguchi
Stimulated Raman scattering from symmetrically illuminated two-layered spherical targets with 527 nm laser light.
Physics of Plasmas 02/1995; 2(2):486-492
<https://doi.org/10.1063/1.870973>
268. Y Kinjo, K Shinohara, A Ito, H Nakano, M Watanabe, Y Horiike, Y Kikuchi, M C Richardson, K A Tanaka
Direct imaging in a water layer of human chromosome fibers composed of nucleosomes and their higher-order structures by laser-plasma X-ray contact microscopy.
Journal of Microscopy 11/1994; 176(Pt 1):63-74
<https://doi.org/10.1111/j.1365-2818.1994.tb03500.x>
269. A Richard, KA Tanaka, K Nishihara, M Nakai, M Katayama, YO Fukuda, T Kanabe, Y Kitagawa, T Norimatsu, M Nakatsuka, T Yamanaka, M Kado, T Kawashima, C Chen, M Tsukamoto, S Nakai
Implosion of D 2 temperature-controlled cryogenic foam targets with plastic ablaters.
Physical Review. E, Statistical physics, plasmas, fluids, and related interdisciplinary topics 03/1994; 49(2):1520-1526
<https://doi.org/10.1103/PhysRevE.49.1520>
270. D Vick, M Kado, H Yamamoto, A Nishiguchi, KA Tanaka, K Mima, AA Offenberger, C. E. Capjack, S Nakai
Hydrodynamics of collisional structures in laser-produced plasmas.
Physical Review. E, 10/1993; 48(3):2308-2311
<https://doi.org/10.1103/PhysRevE.48.2308>
271. Kunio Shinohara, Yasuhito Kinjo, Martin C. Richardson, Atsushi Ito, Noboru Morimoto, Yasuhiro Horiike, Makoto Watanabe, Keiji Yada, Kazuo A. Tanaka
Observation of human chromosome fibers in a water layer by laser-plasma X-ray contact microscopy.
Proceedings of SPIE - The International Society for Optical Engineering 01/1993; 1741.
<https://doi.org/10.1117/12.138754>
272. Martin C. Richardson, Kunio Shinohara, Kazuo A. Tanaka, Yasuhito Kinjo, Naomi Ikeda, Masataka Kado
Pulsed x-ray microscopy of biological specimens with laser plasma sources.
Proceedings of SPIE - The International Society for Optical Engineering 01/1993
<https://doi.org/10.1117/12.138727>

273. M. Kado, K. A. Tanaka, M. Tsukamoto, H. Yamamoto, D. W. Vick, N. Miyanaga, H. Azechi, A. Nishiguchi, K. Mima, S. Nakai: *Study of thermal smoothing by shock speed measurement*. IEEE International Conference on Plasma Science 01/1993;
<https://doi.org/10.1109/PLASMA.1993.593603>
274. S. Nakai, K. Mima, H. Azechi, N. Miyanaga, A. Nishiguchi, T. Yamanaka, K. Nishihara, K. A. Tanaka, M. Nakai, R. Kodama, M. Katayama, M. Kado, M. Tsukamoto, Y. Kato, H. Takabe, H. Nishimura, H. Shiraga, T. Endo, M. Nakatsuka, T. Sasaki, T. Jitsuno, K. Yoshida, T. Kanabe, H. Nakano, M. Yamanaka, K. Naito, T. Norimatsu, M. Takagi, T. Chen, Y. Izawa, C. Yamanaka: *LASER FUSION—High density compression experiment and ignition program with GEKKO XII*. Soviet Journal of Quantum Electronics 10/1992; 22(10):881.
<https://doi.org/10.1070/QE1992v022n10ABEH003625>
275. T. Norimatsu, H. Ito, C. Chen, M. Yasumoto, M. Tsukamoto, K. A. Tanaka, T. Yamanaka, S. Nakai
Cryostat to provide a solid deuterium layer in a plastic shell for the Gekko XII glass laser system. Review of Scientific Instruments 07/1992; 63(6-63):3378 – 3383
<https://doi.org/10.1063/1.1142555>
276. Yoshiaki Kato, Hiroyuki Daido, Hiroyuki Shiraga, Masanobu Yamanaka, Hiromi Azuma, Kensuke Murai, E. Miura, G. Yuan, M. Ohmi, Kazuo A. Tanaka, Tadashi Kanabe, Masaru Takagi: *Development of soft x-ray lasers at the Institute of Laser Engineering: recent results on Ge soft x-ray laser (Invited Paper)*. Proceedings of SPIE - The International Society for Optical Engineering 02/1992; 1551
<https://doi.org/10.1117/12.134808>
277. Y. Kitagawa, T. Matsumoto, T. Minamihata, K. Sawai, K. Matsuo, K. Mima, K. Nishihara, H. Azechi, K. A. Tanaka, H. Takabe, S. Nakai: *Beat-wave excitation of plasma wave and observation of accelerated electrons*. Physical Review Letters 02/1992; 68(1):48-51.
<https://doi.org/10.1103/PhysRevLett.68.48>
278. R. Kodama, K. A. Tanaka, M. Nakai, K. Nishihara, T. Norimatsu, T. Yamanaka, S. Nakai: *Time-resolved measurements of laser-induced shock waves in deuterated polystyrene porous targets by x-ray backlighting*. Physics of Fluids B Plasma Physics 03/1991; 3(3).
DOI:10.1063/1.859869
279. M. Kado, K. A. Tanaka, R. Kodama, T. Yamanaka, S. Nakai, K. Yamashita, M. Ohtani, S. Kitamoto: *Development of a Schwarzschild-type x-ray microscope*. Optics Letters 01/1991; 16(2):109-11.
DOI:10.1364/OL.16.000109
280. S. Kobayashi, T. Norimatsu, M. Nakai, K. A. Tanaka, T. Yamanaka, S. Nakai, K. Ito: *Annealing of polystyrene microcapsules for inertial confinement fusion experiments*.

- Journal of Vacuum Science & Technology A Vacuum Surfaces and Films 01/1991; 9(1):150-153.
DOI:10.1116/1.577117
281. M. Nakai, S. Shinohara, M. Katayama, Y.-W. Chen, S. Kobayashi, N. Miyanaga, K. A. Tanaka, K. Nishihara, M. Yamanaka, T. Yamanaka, S. Nakai: *Development of x-ray emission computed tomography for ICF research*.
Review of Scientific Instruments 11/1990; 61(10-61):2783 - 2785.
DOI:10.1063/1.1141830
282. Yen-Wei Chen, Noriaki Miyanaga, Masanobu Yamanaka, Mitsuo Nakai, Kazuo Tanaka, Katsunobu Nishihara, Tatsuhiko Yamanaka, Sadao Nakai: *Three-dimensional imaging of laser imploded targets*. Journal of Applied Physics 09/1990; 68(4-68):1483 - 1488.
DOI:10.1063/1.346677
283. Masahiro Tsukamoto, Ryosuke Kodama, Masataka Kado, Hajime Ito, Masaki Yasumoto, Takayoshi Norimatsu, Mitsuo Nakai, Kazuo A. Tanaka, Tatsuhiko Yamanaka, Sadao Nakai: *A monitoring system for the real-time characterization of cryogenic fuel layer in laser-fusion targets*.
The Review of Laser Engineering 01/1990; 18(9):724-731.
DOI:10.2184/ljsj.18.9_724
284. K. Mima, K. Imasaki, S. Kuruma, T. Akiba, N. Ohigashi, Y. Tsunawaki, K. Tanaka, C. Yamanaka, S. Nakai: *Theory and experiments for the induction linac FEL*.
Nuclear Instruments and Methods in Physics Research Section A Accelerators Spectrometers Detectors and Associated Equipment 12/1989; 285(1-2):47-52.
DOI:10.1016/0168-9002(89)90423-3
285. Kazuo Tanaka, Masataka Kado, Ryosuke Kodama, Michiya Otani, Shunji Kitamoto, Tatsuhiko Yamanaka, Koujun Yamashita, Sadao Nakai: *Soft X-Ray Microscopy In Laser-Plasmas*.
Proceedings of SPIE - The International Society for Optical Engineering 10/1989;
DOI:10.1117/12.961868
286. Kazuo Tanaka, Hiroaki Aritome, Tadashi Kanabe, Masahiro Nakatsuka, Tatsuhiko Yamanaka, Sadao Nakai: *Laser plasma x-ray source and its application to lithography*.
Proceedings of SPIE - The International Society for Optical Engineering 10/1989;
DOI:10.1117/12.961844
287. K. A. Tanaka, Y. Kato, S. Nakai, H. Shiraga, T. Yabe, T. Yamanaka, T. Endo, R. Kodama, C. Yamanaka: *Energy transport experiments at Institute of Laser Engineering, Osaka University*.
Laser and Particle Beams 07/1989; 7(03):495 - 504.
DOI:10.1017/S0263034600007461
288. K. A. Tanaka, A. Yamauchi, R. Kodama, T. Mochizuki, T. Yabe, T. Yamanaka, S. Nakai, C. Yamanaka: *Experimental study of energy transport in thin Al and Au foils irradiated with a 263-nm laser*.
Journal of Applied Physics 07/1989; 65(12-65):5068 - 5071.
DOI:10.1063/1.343182
289. Takashi Yabe, Kazuo A. Tanaka: *Long Ion Mean-Free Path and Nonequilibrium Radiation Effects on High-Aspect-Ratio Laser-Driven Implosions*.
Laser and Particle Beams 04/1989; 7(02):259 - 265.
DOI:10.1017/S0263034600006029

290. Masaki Saito, Shinji Urushihara, Kazuhiro Suzuki, Kazuo A. Tanaka, Tatsuhiko Yamanaka, Sadao Nakai: *Detection system of the cryogenic target default for laser fusion experiment.* The Review of Laser Engineering 01/1989; 17(10):721-726.
DOI:10.2184/ljsj.17.10_721
291. Yoshiya Nishino, Takayoshi Norimatsu, Hidefumi Katayama, Masaru Takagi, Kazuo Tanaka, Mitsuo Nakai, Yoshiaki Kato, Tatsuhiko Yamanaka, Sadao Nakai, Chiyoe Yamanaka: *Control of fuel mass loaded in a cryogenic foam target for inertial confinement fusion experiment.* T EION KOGAKU (Journal of the Cryogenic Society of Japan) 01/1989; 24(6):351-356.
DOI:10.2221/jcsj.24.351
292. T. Norimatsu, H. Katayama, T. Mano, M. Takagi, R. Kodama, K. A. Tanaka, Y. Kato, T. Yamanaka, S. Nakai, Y. Nishino, M. Nakai, C. Yamanaka: *Fabrication of a cryogenic foam target for inertial confinement fusion experiments.* Journal of Vacuum Science & Technology A Vacuum Surfaces and Films 12/1988; 6(6-6):3144 - 3147.
DOI:10.1116/1.575490
293. Takashi Yabe, Kazuo A. Tanaka: *Finite ion-relaxation and nonequilibrium radiation effects on laser-driven implosions.* Journal of the Physical Society of Japan 07/1988; 57(7):2237-2240.
DOI:10.1143/JPSJ.57.2237
294. R Kodama, M Kado, KA Tanaka, A Yamauchi, T Mochizuki, T Yamanaka, S Nakai, C Yamanaka: *Measurements of electron temperature in x-ray heated plasmas.* Physical Review A 06/1988; 37(9):3622-3625.
DOI:10.1103/PhysRevA.37.3622
295. K. A. Tanaka, A. Yamauchi, R. Kodama, T. Mochizuki, T. Yamanaka, S. Nakai, C. Yamanaka: *Enhancement of soft x-ray emission using prepulses with 2ω and 4ω laser plasmas.* Journal of Applied Physics 04/1988; 63(5-6):1787 - 1789.
DOI:10.1063/1.339922
296. Yamauchi, K. A. Tanaka, R. Kodama, M. Kado, T. Yamanaka, T. Mochizuki, S. Nakai, C. Yamanaka: *Energy transport in aluminum targets irradiated by a 263-nm laser.* Applied Physics Letters 04/1988; 52(10-52):786 - 788.
DOI:10.1063/1.99284
297. T Mochizuki, K Mima, N Ikeda, R Kodama, H Shiraga, KA Tanaka, C Yamanaka: *Experimental evidence of ionization burnthrough and absorption resonance in radiative energy transport in hot dense matter.* Physical Review A 11/1987; 36(7):3279-3287. DOI:10.1103/PhysRevA.36.3279
298. Y. Sakawa, K. A. Tanaka, H. Nishimura, M. Nakai, T. Yabe, H. Sakurai, Y. Izawa, Y. Kato, T. Mochizuki, M. Nakatsuka, C. Yamanaka: Phys. Fluids 30, 3276 (1987);
<http://dx.doi.org/10.1063/1.866504>
299. R. Kodama, T. Mochizuki, K. A. Tanaka, C. Yamanaka: *Enhancement of keV x-ray emission in laser-produced plasmas by a weak prepulse laser.* Applied Physics Letters 04/1987; 50(12-50):720 - 722.
DOI:10.1063/1.98078
300. KA Tanaka, M Mineo, T Boehly, T Mochizuki, K Nishihara, C Yamanaka: *Strong Damping of Stimulated Brillouin Scattering in Cavity-Structured Targets.*

- Physical Review Letters 02/1987; 58(1):33-36.
DOI:10.1103/PhysRevLett.58.33
301. T. Boehly, K. A. Tanaka, T. Mochizuki, C. Yamanaka: *Measurements of mass ablation rate and pressure in planar targets irradiated by 0.27- μ m laser light*.
Journal of Applied Physics 01/1987; 60(11-60):3840 - 3844.
DOI:10.1063/1.337553
302. T. Boehly, K. A. Tanaka, T. Mochizuki, K. Nishihara, Y. Sakawa, M. Murakami, K. Sakurai, C. Yamanaka: *Absorption of 0.53 μ m laser light in cannonball targets*.
Optics Communications 11/1986; 60(3):169-174.
DOI:10.1016/0030-4018(86)90173-2
303. N. Ikeda, K. A. Tanaka, K. Okada, T. Mochizuki, C. Yamanaka: *Diode-array coupled time-resolved transmission grating spectrometer*.
Review of Scientific Instruments 11/1986; 57(10-57):2489 - 2492.
DOI:10.1063/1.1139098
304. R. Kodama, K. Okada, N. Ikeda, M. Mineo, K. A. Tanaka, T. Mochizuki, C. Yamanaka: *Soft X-ray emission from ω_0 , $2\omega_0$, and $4\omega_0$ laser-produced plasmas*.
Journal of Applied Physics 06/1986; 59(9-59):3050 - 3052.
DOI:10.1063/1.336927
305. Yasukazu Izawa, Kazuo A Tanaka, Takayasu Mochizuki, Yoneyoshi Kitagawa, Mitsuo Nakai, Hiroyuki Shiraga, Masanobu Yamanaka, Tatsuhiko Yamanaka, Hiroshi Azech, Noriaki Miyanaga, Hideaki Niki: *Laser Fusion Implosion Experiments*.
The Review of Laser Engineering 01/1986; 14(12):1090-1132.
DOI:10.2184/ljsj.14.1090
306. K. Tanaka, B. Boswell, R. S. Craxton, L. M. Goldman, F. Guglielmi, W. Seka, R. W. Short, J. M. Soures: *Brillouin scattering, two-plasmon decay, and self-focusing in underdense ultraviolet laser-produced plasmas*.
The Physics of Fluids, 09/1985; 28(9):2910-2914.
DOI:10.1063/1.865211
307. W. Seka, B. B. Afeyan, R. Boni, L. M. Goldman, R. W. Short, K. Tanaka, T. W. Johnston: *Diagnostic value of odd-integer half-harmonic emission from laser-produced plasmas*.
The Physics of Fluids, 08/1985; 28(8):2570-2579.
DOI:10.1063/1.865265
308. K. Tanaka, L. M. Goldman, W. Seka, R. W. Short, E. A. Williams: *Spectroscopic study of scattered light at around the fundamental wavelength in UV laser-produced plasmas*.
The Physics of Fluids 27, 2960 (1984)12/1984; 27(12):2960-2965.
DOI:10.1063/1.864612
309. R. L. Keck, L. M. Goldman, M. C. Richardson, W. Seka, K. Tanaka: *Observations of high-energy electron distributions in laser plasmas*.
The Physics of Fluids 27, 2762 (1984)11/1984; 27(11).
DOI:10.1063/1.864581
310. K. Tanaka, W. Seka, L. M. Goldman, M. C. Richardson, R. W. Short, J. M. Soures, E. A. Williams: *Evidence of parametric instabilities in second harmonic spectra from 1054 nm laser-produced plasmas*. The Physics of Fluids 27, 2187 (1984), 08/1984; 27(8):2187-2190.
DOI:10.1063/1.864845

311. W. Seka, R. S. Craxton, L. M. Goldman, R. W. Short, K. Tanaka, E. A. Williams: *Convective stimulated Raman scattering instability in UV laser plasmas*.
The Physics of Fluids 27, 2181 (1984);08/1984; 27(8):2181-2186.
DOI:10.1063/1.864844
312. R. W. Short, W. Seka, K. Tanaka, E. A. Williams: *Two-Plasmon Decay and Three-Halves Harmonic Generation in Filaments in a Laser-Produced Plasma*.
Physical Review Letters 04/1984; 52(17):1496-1499.
DOI:10.1103/PhysRevLett.52.1496
313. Makoto Katayama, Kazuo A. Tanaka, Tatsuhiko Yamanaka, Yasukazu Izawa, Sadao Nakai, Mitsuo Nakai, Chiyoe Yamanaka: *X-ray framing camera images of imploding targets*.
Proceedings of SPIE - The International Society for Optical Engineering 01/1984;
DOI:10.1117/12.961854
314. W. Seka, L. M. Goldman, J. M. Soures, R. S. Craxton, T. Boehly, R. L. Keck, K. Tanaka, R. Boni, B. Yaakobi, R. Bingham, E. Williams, R. W. Dreyfus, P. Bogen, H. Langer, H. A. Baldis, C. J. Walsh, Xu Zhi-zhan, Xu Yu-guang, Yin Guang-yu, Zhang Yan-zhen, Yu Jiajin, P. H. Y. Lee, K. Eldmann, A. G. M. Maaswinkel, R. Sigel, S. Witkowski, R. J. Harrach, A. Szoke, M. C. Richardson, W. Friedman, D. M. Villeneuve, J. Hoose, S. Letzring, J. Rizzo, J. Delettrez, K. Lee, C. Verdon, B. Brinker, R. Hutchison, L. Iwan, R. L. McCrory: *Laser plasmas*.
Applied Physics B 05/1982; 28(2):290-296.
DOI:10.1007/BF00697858
315. K.A. Tanaka, Goldman, LM, Seka, Richardson, MC, Soures, J.M, Williams, E.A: *Stimulated Raman Scattering from UV-Laser-Produced Plasmas*.
Physical Review Letters 04/1982; 48(17).
DOI:10.1103/PhysRevLett.48.1179
316. W. Seka, L. Goldman, Mark Richardson, J. Soures, B. Yaakobi, T. Boehly, R. Keck, Kiyoshi Tanaka, K. Forsley, R. Boni, R. Craxton, J. Delettrez, R. McCrory: *0.35- μ m laser-matter interaction experiments at the University of Rochester*.
IEEE Journal of Quantum Electronics 01/1982; 17(12-17):2412 - 2412.
DOI:10.1109/JQE.1981.1070752
317. K. Tanaka, L. Goldman, W. Seka, J. Soures, R. Craxton: *Backscatter measurements in 0.35- μ m irradiation experiments*. IEEE Journal of Quantum Electronics 01/1982; 17(12-17):2414 - 2414.
DOI:10.1109/JQE.1981.1070774
318. Kazuo Tanaka, Leonard M. Goldman: *Observations of Brillouin Sidescatter in Laser-Produced Plasmas*. Physical Review Letters 11/1980; 45(19):1558-1561.
DOI:10.1103/PhysRevLett.45.1558
319. H. Azechi, S. Oda, K. Tanaka, T. Norimatsu, T. Sasaki, T. Yamanaka, C. Yamanaka: *Laser-driven shock wave inside a glass microballoon target*.
Applied Physics Letters 01/1978; 32(4):216-218.
DOI:10.1063/1.89995
320. H. Azechi, S. Oda, K. Tanaka, T. Norimatsu, T. Sasaki, T. Yamanaka, C. Yamanaka: *Measurement of Density Modification of Laser-Fusion Plasmas*.
Physical Review Letters 10/1977; 39(18).
DOI:10.1103/PhysRevLett.39.1144

Total of more than 400 papers are published. Here papers in Japanese are excluded in this list.

Conference Presentation (Only part)

1. KA Tanaka, Implementation of Extreme Light Infrastructure: Nuclear Physics, OPIC, ALPS, HEDS j-1
Apr. 19, 2017
2. KA Tanaka, Status of high-power lasers and experiments at ELI-Nuclear Physics, Romania, SPIE Proceedings Volume 11777, High Power Lasers and Applications; 1177705 (2021)
3. K. Mikami, S. Motokoshi, T. Somekawa, T. Jitsuno, M. Fujita, K. A. Tanaka: *A theoretical analysis for temperature dependences of laser-induced damage threshold*. SPIE Laser Damage; 11/2013
4. Y. Hirooka, T. Yabuuchi, K.A. Tanaka: *PPPS-2013: Aerosol formation and buffer gas effects in a high-repetition rate ICF reactor*. Plasma Science (ICOPS), 2013 Abstracts IEEE International Conference on; 01/2013
5. H. Habara, Y. Mishima, N. Nakanii, S. Honda, M. Katayama, L. Gremillet, L. Willingale, A. Maksimchuk, K. Krushelnick, K.A. Tanaka: *Enhanced energy coupling by using structured nano-wire targets*. IFSA 2011; 01/2013
6. K.A. Tanaka, K. Kikuyama, T. Kono, S. Misaki, T. Ohishi, N. Ohmoto, M. Osada, A. Sunahara, Y. Hirooka: *Study on behaviors of laser produced plumes for fusion material ablation*. Plasma Science (ICOPS), 2011 Abstracts IEEE International Conference on; 01/2011
7. Sunahara, S. Misaki, K.A. Tanaka: *Numerical simulation of laser-produced plumes*. Plasma Science (ICOPS), 2011 Abstracts IEEE International Conference on; 01/2011
8. N Miyana, H. Azechi, K A Tanaka, T. Kanabe, T. Jitsuno, J. Kawanaka, Y Fujimoto, H Shiraga, K. Knodo, K. Tsubakimoto, Y Nakata, H Habara, R Kodama, J Lu, G Xu, K Sueda, N. Morio, S Matsuo, T Kawasaki, H Kitamura, H Matsuo, T Sakamoto, K. Mima: *Technological Challenge and Activation of High-Energy PW Laser LFEX*. Lasers and Electro-Optics - Pacific Rim, 2007. CLEO/Pacific Rim 2007. Conference on; 09/2007
9. Keiji Nagai, F Ito, H Yang, A Iwamoto, M Nakai, H Homma, H Shiraga, H. Azechi, K A Tanaka, R Kodama, T. Norimatsu, K. Mima: *Encapsulation of Low Density Materials for the First Stage of Fast Ignition Realization Experiment (FIREX-I) - Control of Microstructure and Gelation Process using a Phase-Transfer Catalyst and Tailored Polymers*. Fusion Engineering, 2007. SOFE 2007. 2007 IEEE 22nd Symposium on; 07/2007
10. A Mackinnon, M Key, K Akli, F Beg, R Clarke, D Clarke, M Chen, H Chung, S Chen, R Freeman, J Green, P Gu, G Gregori, K Highbarger, H Habara, S Hatchett, D Hey, R Heathcote, J Hill, J King, R Kodama, J Koch, K Lancaster, B Langdon, C Murphy, P Norreys, D Neely, M Nakatsutsumi, H Nakamura, N Patel, P Patel, J Pasley, R Snavley, R Stephens, C Stoeckl, M Foord, M Tabak, W Theobald, M Storm, K Tanaka, M Tempo, M Toley, R Town, S Wilks, L VanWoerkom, R Weber, T Yabuuchi, B Zhang: *Studies of electron and proton isochoric heating for fast ignition*. 10/2006
11. M H Key, F Amiranoff, C Andersen, D Batani, S D Baton, T Cowan, N Fisch, R Freeman, L Gremillet, T Hall, S Hatchett, J Hill, J King, R Kodama, J Koch, M Koenig, B Lasinski, B Langdon, A MacKinnon, E Martinolli, P Norreys, P Parks, E Perrelli-Cippo, M Rabec Le Gloahec, M Rosenbluth, C Rousseaux, J J Santon, F Scianitti, R Snavely, M Tabak, K Tanaka, R Town, T Tsutsumi, R Stephens: *Studies of Electron Transport and Isochoric Heating and Their Applicability to Fast Ignition*. 10/2003

12. R A Snavely, P Gu, J King, D Hey, K Akli, B B Zhang, R Freeman, S Hatchett, M H Key, J Koch, A B Langdon, B Lasinsky, A MacKinnon, P Patel, R Town, S Wilks, R Stephens, T Tsutsumi, Z Chen, T Yabuuchi, T Kurahashi, T Sato, K Adumi, Y Toyama, J Zheng, R Kodama, K A Tanaka, T Yamanaka: *Proton Beam Focusing and Heating in Petawatt Laser-Solid Interactions*. 08/2003
13. Y. Kitagawa, H. Fujita, R. Kodama, H. Yoshida, T. Jitsuno, S. Sakabe, K.A. Tanaka, H. Nishimura, Y. Izawa, K. Mima, T. Yamanaka: *Petawatt laser for fast ignitor and laser matter interaction research*. Lasers and Electro-Optics, 2001. CLEO/Pacific Rim 2001. The 4th Pacific Rim Conference on; 02/2001
14. H Fujita, H Yoshida, S Matsuo, T Kawasaki, T. Kanabe, R Kodama, Y Kitagawa, K A Tanaka, M Nakatsuka, K. Mima: *High power Nd:glass laser for fast ignition research*. Lasers and Electro-Optics, 1999. CLEO/Pacific Rim '99. The Pacific Rim Conference on; 02/1999
15. K. Tanaka, B. Boswell, R.S. Craxton, L.M. Goldman, W. Seka, R.W. Short, J.M. Soures, R. Bahr, F. Guglielmi: *Parametric processes in underdense uv laser-produced plasmas*. 10/1984

Awards

- APS (American Physics Society) Fellow (2003),
- Award of Ministry of Education and Culture (MEXT) Japan (2005),
- APS Excellence (Dawson) Award (2006),
- Daiwa Award, UK (2007)
- Progress Award from Laser Society of Japan (2011).