# OPTO2022 Poster Program

## 6月28日（28th June） 16：00-17：30

| ポスター番号 Poster Number | ベストポスター賞対象 Best Poster award applicant | 発表者氏名 Presenter | 代理発表者 Substitute Presenter | 研究課題名 Research Title |
|---|---|---|---|---|
| 28-1 | | Zhe Zhang | | Collimated charged particles generation and application with accompanied magnetic field |
| 28-2 | | Shuichi Matsukiyo | | Empirical research of self-reformation of collisionless shock |
| 28-3 | | Taichi Morita | | Investigation of the structure and rate of a laser-driven magnetic reconnection |
| 28-4 | | Paul Mabey | | Studying the interplay between shocks and magnetic fields in the Universe |
| 28-5 | * | SAKAWA Youichi | Shunsuke Egashira | Particle acceleration via magnetic reconnection using capacity coil target |
| 28-6 | | Shuta Tanaka | | Preparation to laser experiments of induced Compton scattering |
| 28-7 | | Shota Kisaka | | Theoretical study for experimental verification of conditions of coherent radiation and stimulated emission for understanding of Fast Radio Bursts |
| 28-8 | | Akira Mizuta | | Study of hydrodynamic instabilities in astrophysical jet propagation using ultra intense laser plasma experiments |
| 28-9 | | Yuji Fukuda | | Ion acceleration using collisionless shocks produced in nonequilibrium plasmas |
| 28-10 | | Norimasa Ozaki | | Phase transition kinetics observed using laser-driven decaying shock compression |
| 28-11 | | EINAGA Mari | | LASER DAC Hybrid Compression Experiment on High Temperature Superconducting Hydrogen Sulfide |
| 28-12 | | Tomoko Sato | Norimasa Ozaki | Melting behavior of silicate during planetary evolution |
| 28-13 | * | Shinsuke Fujioka | Ryunosuke Takizawa | High density compression with tailored laser pulse and solid ball |
| 28-14 | | Dimitri BATANI | | Behavior and optical properties of materials of planetological interest (water, carbon, LiH) at Megabar pressures |
| 28-15 | | Hajime Yano | | Fundamental Development of Microparticle Capture System through Hypervelocity Impact Simulations and Experiments at >10 km/s |
| 28-16 | * | Jiayong Zhong | Law King Fai Farley | Zeeman splitting in the EUV spectrum emitted from a magnetized silicon plasma |
| 28-17 | | Hantao Ji | | Study of Particle Acceleration from Magnetically-Driven Collisionless Reconnection at Low Plasma Beta Using Laser-Powered Capacitor Coils |
| 28-18 | | Yasunobu Arikawa | | Study on generation of a large electric current generation by using two-wavelengths and polarizations mixed ultra high intensity laser |
| 28-19 | * | Akifumi Iwamoto | Wei Tianyun | Pure proton/deuteron beam acceleration by laser |
| 28-20 | | Mamiko Nishiuchi | | Investigation of the formation of high intensity laser produced highly charged heavy ion plasmas |
| 28-21 | | Takeshi Higashiguchi | | Development of high-repetition rate laser-produced plasma quantum beam source by regenerative D2O target |
| 28-22 | | Ieyasu Tokumoto | | Development of New Soil Moisture Detection System by Neutrons |
| 28-23 | | Shunsuke Inoue | Yasunobu Arikawa | The development for a higher pulse power on a 589-nm DPSS laser by using Passive Q-switch |
| 28-24 | | Toru Sato | Yasunobu Arikawa | Theoretical study on neutron generation by disintegration of polarized deuterium |
| 28-25 | * | Akifumi Iwamoto | Tsuneya KATSU | Development of a solid deuterium foil target system for laser neutron generation |
| 28-26 | | Masahiro Kitagawa | Yasunobu Arikawa | Development of spin polarized deuterium target by using dynamic nuclear polarization for laser driven neutron generation |
| 28-27 | | Shinsuke Fujioka | | Realization of stable, quasi-static and high-density material compression with tailored laser pulse and solid ball target |
| 28-28 | * | Delahaye | Jinyuan Dun | Opacities for astrophysical applications |
| 28-29 | | Hiroshi Sawada | | Study of characteristic K-alpha x-ray production using high power LFEX laser |
| 28-30 | | Alessio Morace | | Ion stopping power in dense plasmas |
| 28-31 | | Tomoyuki Johzaki | | Development of X-ray ray-tracing code and its application to experimental analysis |
| 28-32 | | Yasuhiko Sentoku | | Study of Isochoric heating physics using XFEL(SACLA) |
| 28-33 | | Yasuhiko Sentoku | | Developing a photon scattering model in non-thermal high energy density plasmas in PICLS code |
| 28-34 | * | Hideaki Habara | Yoshinori Ueyama | Modeling of magnetic field creation via resistivity gradient in the high density plasma |
| 28-35 | | Francisco Cobos-Campos | | Dependence of Richtmyer-Meshkov Instability growth on gas compressibility |
| 28-36 | | Yoshitaka Mori | | Investigation of electromagnetic wave propagation/absorption and plasma heating with polarization-controlled counter-illuminating intense laser pulse |
| 28-37 | | Natsumi Iwata | | Theoretical study on particle acceleration in high energy density plasmas created by kJ class ultraintense lasers |
| 28-39 | | Shingo Ono | Yuma Takeda | Development of broadband antireflection structure in THz region |
| 28-40 | | Iwao Kawayama | | High frequency characteristics of non-Drude-type conductors |
| 28-41 | | Masahiko Tani | | Study on high-efficiency terahertz wave generation by metallic spintronic devices |
| 28-42 | | Tatsunosuke Matsui | | Terahertz fast switching utilizing organic semiconductors |
| 28-43 | | Mihoko Maruyama | | Identification and imaging of polymorphs in urinary stones by terahertz spectroscopy |
| 28-44 | | Fumiyoshi Kuwashima | | simultaneity of laser modes in laser chaos through plasmon antenna |
| 28-45 | | Makoto Asakawa | | Smith-PUrcell radiation emitted from ps electron bunch in THz wave range |
| 28-46 | | Akira Sasaki | | Analysis of damage of optical materials through micro breakdown using percolation |
| 28-47 | | Kotaro Makino | | Terahertz spectroscopic study of phase change materials and device applications |
| 28-48 | | Sang-Seok Lee | Tatsuki Hanada | IR and THz Transmission Characteristics of Metal Organic Framework Thin Film Fabricated on the Flexible Substrate |
| 28-49 | | Sakae Kawato | | Theoretical analysis of expansion of output pulse width and chirp linearization of positive dispersion mode-locked laser using high gain and high non-linearity effect. |
| 28-50 | | Sakae Kawato | Hiroki Goto | Higher Efficiency of Laser Diode Pumped Hemispherical Cavity Continuous Wave Yb:YAG Lasers |
| 28-51 | | Ken Morita | | Spin manipulation using high power THz pulse |
| 28-52 | | Shigeki Nashima | | Fabrication of metal hole with sharp transmission spectra in terahertz region |
| 28-53 | | Shingo Sato | | 空孔クラスタの形成過程の解明 |

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| ポスター番号 Poster Number | ベストポスター賞対象 Best Poster award applicant | 発表者氏名 Presenter | 代理発表者 Substitute Presenter | 研究課題名 Research Title |
|---|---|---|---|---|
| 28-54 | | Nao Shibata | | HoloLens2を用いた放射線可視化システムの開発 |
| 28-55 | | Haruto Miura | | 放射線影響下におけるDNA切断回数の時系列解析を目指した画像処理技術の開発 |
| 28-56 | * | Ikuto Ohtaka | | 赤城大沼湖水中セシウム濃度時間発展予測モデルの素過程解明 |
| 28-57 | * | Yuki Kojima | | タングステン壁におけるリサイクリング水素分子の振動・回転準位の見積もり |
| 28-58 | * | Masato Iida | | 炭素壁水素リサイクリング過程の分子動力学シミュレーションと機械学習による放出粒子予測の試み |
| 28-59 | * | Yohei Tsuchida | | DNAのトリチウム耐性評価を 目指したトリチウム置換確率の検討 |
| 28-60 | * | Kazushi Terakawa | | 脱塩基部位を有するクラスターDNA損傷の分子動力学シミュレーション |
| 28-61 | * | Arqum Hashmi | | Single-cycle two-color induced valley polarization in WSe2 monolayer |
| 28-62 | * | Masayasu Hata | | 量子メス開発におけるレーザー加速イオン入射器シミュレーションの進展 |
| 28-63 | | Chang Liu | | Plasma temperature diagnostic using high energy X-ray spectrometer in Ion-acceleration experiment |
| 28-64 | * | Yasuhiro Miyasaka | | Water cooled SiC ceramic substrate for heat resistant optics |
| 28-65 | | Sadaoki Kojima | | 次世代重粒子線がん治療装置のための高純度炭素イオンのレーザー駆動加速 |
| 28-66 | | Tatiana Pikuz | | Spectroscopic observation of a strong magnetic field induced in high-density relativistic plasma |
| 28-67 | * | Ryuta Kawanami | | OHラジカルによるDNA損傷メカニズムの 分子動力学シミュレーション研究 |
| 28-68 | | Tomomasa Ohkubo | | Machine Learning of Dielectric Mirror for High Power Lasers |
| 28-69 | * | Matys Martin | | Optimization of ion beam parameters using steep-front laser pulse |

# OPTO2022 Poster Program

## 6月29日（29th June）10：00-12：00

| ポスター番号 Poster Number | ベストポスター賞対象 Best Poster award applicant | 発表者氏名 Presenter | 代理発表者 Substitute Presenter | 研究課題名 Research Title |
|---|---|---|---|---|
| 29-1 | | Tadashi Kanabe | Naoaya Miyaji | Improvement of LFEX laser system. |
| 29-2 | | Shinji Motokoshi | | Build-up of silica glass structures by laser fabrication metod |
| 29-3 | | Takahiro Murata | | Improvement on characteristics of Pr3+-doped glass scintillator for neutron detector |
| 29-4 | | Marilou Cadatal-Raduban | | Investigating the scintillation properties of rare-earth-doped APLF glasses with various doping concentrations and excitation sources |
| 29-5 | | Hiroaki Furuse | | Development of transparent ceramics |
| 29-6 | | Yasushi Fujimoto | | Development on advanced functional optical fiber devices and its application |
| 29-7 | | Yuki Iwasa | Kohei Yamanoi | Luminescence properties of rare-earth doped mixed-anion compounds |
| 29-8 | | Hiraku Ogino | | Development of novel excitonic luminescence materials by layered mixed-anion compounds |
| 29-9 | | Toshiki Yamada | Yasunobu Arikawa | The modification of the wavelength of EO polymer for ion/neutron measurement in laser fusion experiment |
| 29-10 | | Yusuke Mori | | High quality large scale borate optical crystal |
| 29-11 | * | Hiroshi Yoshikawa | Hozumi Takahashi | Production of Organic Functional Crystals by Using Intensive Lasers |
| 29-12 | | Hideo Nagatomo | | Research workshop on simulation and datability for high energy density science |
| 29-14 | | Shigenobu Hirose | | Radiation MHD simulations of accretion disks |
| 29-15 | | Hiroyuki Furukawa | | Development of integrated simulation code on laser processing using ultra short pulse lasers. |
| 29-16 | | Yuichi Inubushi | | Study of transient state of intense-laser-produced plasma using femtosecond X-ray spectroscopy |
| 29-17 | | Chihiro Matsuoka | | Nonlinear interaction in multi-layer fluid interfaces with density stratification |
| 29-18 | | Minoru Tanabe | | Evaluation of laser speckles with red, green, and blue colored  laser light sources and its suppression |
| 29-19 | | Hitoshi Nakano | | Development of a transparent Nd:CaF2 ceramic material |
| 29-20 | | Takayoshi Sano | | Decay instabilities of whistler waves in solar wind plasmas |
| 29-21 | | Atsushi Sunahara | | Numerical modeling of plasma facing materials |
| 29-22 | | Masayuki Fujita | Toshihiro Somekawa | Research on development, control, applications of quantum beam sources |
| 29-23 | | Mitsuo Koizumi | | Develoment of a measurement system for neutron resonance transmission analysis witl a laser driven neuton source |
| 29-24 | | Hiroshi Furuta | | THz radiation and absorption properties of CNT forest metamaterials |
| 29-25 | | Yasuhisa Oda | | Development of real-time control system for application of repetitive-pulse high-power laser |
| 29-26 | | Youhei Masada | | Interaction of Turbulent Field and Mean Field : Development of 3D Mean-field Solar Dynamo Model |
| 29-27 | | Shunsuke Kurosawa | | Development of Transparent Ceramics II |
| 29-28 | | Takahiro Kawamura | | Effect of point and complex defects on optical properties of GaN |
| 29-29 | | Fumiyoshi KUWASHIMA | | Low cost and stable CW-THz spectroscopy for volcanic ash |
| 29-30 | | Hiroshi Sawada | | Investigation of imploded cone-in-shell targets in externally applied magnetic fields |
| 29-31 | * | Masato Ohta | | "Ultrafast detection of quantum beams by electro-optic sampling" |
| 29-32 | * | | Koki Kawasaki | Improvements on implosion performance with diamond capsule target |
| 29-33 | | | Yasunobu Arikawa | Laser fusion burn history measurement by using pico second time resolution neutron detector |
| 29-34 | | | Yasunobu Arikawa | 高速イメージングセンサーNanoSISを用いたレーザー核融合中性子イメージング |
| 29-35 | * | Junpei Fujiiki | | Fast electron collimation by self-generated magnetic fields |
| 29-36 | | Hitoshi Sakagami | | 先導極超高強度レーザーによる高速電子のガイディング効果 |
| 29-37 | * | Tomoyuki Idesaka | Tomoyuki Idesaka | Target design for shock ignition scheme of direct drive laser fusion |
| 29-38 | | Tomoyuki Johzaki | | 高速点火レーザー核融合の点火燃焼特性に対するキロテスラ級磁場効果 |
| 29-39 | | Akifumi Iwamoto | | レーザー核融合未臨界研究炉の核融合中性子-熱変換特性の評価 |
| 29-40 | | Nozomi Tanaka | | SRJ Joint Research Division for Laser Application |
| 29-42 | | Mizuki Tani | | Vlasov simulation of electron dynamics in aluminum under intense laser fields |
| 29-43 | * | Daisuke Tanaka | | "Study on energy transportation of nanowire array under ultra high energy density state." |
| 29-44 | * | Prachi Venkat | | Study of laser excitation and damage in silicon using Three-Temperature model |
| 29-45 | | Liu Chang | | Plasma temperature diagnostic using high energy X-ray spectrometer in Ion-acceleration experiment |
| 29-46 | | Masakatsu Murakami | | 超高強・超高出力レーザーによるメガテスラ磁場とSchwinger電場への挑戦 |
| 29-47 | * | Tamaki Maekawa | | 硬X線計測と発見的手法を用いた高速電子の特性の診断 |
| 29-48 | | Shuji Miyamoto | | Power Laser DX Platform |
| 29-49 | | James Kevin Koga | | On the possibility of the detection of viruses in air via laser induced breakdown spectroscopy |
| 29-50 | | Mamiko Nishiuchi | | High intensity laser driven charged particle acceleration via relativistic transparency regime |
| 29-51 | | Atsushi Tamii | | エマルションを利用したレーザープラズマからのガンマ線計測技術の開発 |
| 29-52 | | Tomoyuki Endo | | ホルムアルデヒド分子の光解離過程の励起波長依存性 |
| 29-53 | | Ken Akamatsu | | 水中の近赤外フェムト秒レーザーフィラメントによって生じるDNA損傷の特性 |
| 29-54 | * | Kotaro Imasaka | | LiInS2による非同軸光パラメトリック増幅法を用いた赤外超短パルス光発生 |

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|---|---|---|---|---|
| 29-55 | | Nobuhisa Ishii | | Ybレーザーを励起源とする高強度極短赤外光源開発 |
| 29-56 | * | Kento Ishiguro | | トリチウム壊変がもたらすDNA損傷のMDシミュレーション |
| 29-57 | | Hiroyuki Katsuki | | 振動ポラリトン計測用可変長セルの開発 |
| 29-58 | | ZHANG JIAQI | | Characterization of Solid D-T Fuel for Fusion Reactor Using Refractive Index Distribution Analysis |
| 29-59 | * | Wang Yubo | | A high-transmittance Schwarzschild objective (SO) to focus high-intensity EUV-VUV light from laser-plasma light source |
| 29-60 | | Toshihiro Taguchi | | Interaction between ultra-intense laser and plasmas |