

# Short Presentations for Poster Session 1 and 2

Date: June 11, Main Hall

|    | Poster No. | Submission No. | LPM or HPL | Poster Session   | Student | one-page slide submission | Last name | First name | Presentation title   |
|----|------------|----------------|------------|------------------|---------|---------------------------|-----------|------------|--|
| 1  | P-46       | C000301        | HPL2025    | Poster Session 2 |         | No Submission             | Kikuchi   | Toshifumi  | Estimation of temporal temperature distribution in blue laser welding of copper using thermal radiation imaging                |
| 2  | P-47       | C000268        | HPL2025    | Poster Session 2 |         | 1                         | Ohkubo    | Tomomasa   | 1-Dimensional Numerical Simulation at the Laser Irradiated Point in Selective Laser Thermoregulation System                    |
| 3  | P-48       | C000279        | HPL2025    | Poster Session 2 | 1       | 1                         | Maeda     | Koki       | Experimental investigation of the denudation zone in Ti-6Al-4V fabrication by powder bed fusion using blue diode Laser         |
| 4  | P-49       | C000319        | HPL2025    | Poster Session 2 |         | 1                         | Yamashita | Yorihiro   | Effect of Multi-Spot Laser Irradiation on Crack Suppression in Metal Formation using Laser Metal Deposition                    |
| 5  | P-50       | C000026        | HPL2025    | Poster Session 2 |         | 1                         | Tokuda    | Masashi    | High-attenuation and polarization-independent beam sampling technique based on evanescent light coupling                       |
| 6  | P-85       | C000011        | HPL2025    | Poster Session 2 |         | No Submission             | Yang      | Guowei     | Laser production of clean energy by laser bubbling in liquids  |
| 7  | P-52       | C000185        | LPM2025    | Poster Session 2 | 1       | 1                         | Watanabe  | Shunto     | Interferometric measurement of ultrasound generated by femtosecond laser pulses focused on a glass surface                     |
| 8  | P-53       | C000269        | LPM2025    | Poster Session 2 | 1       | 1                         | Ogata     | Kei        | Observation of laser-generated ultrasound using pump-probe digital holography  |
| 9  | P-54       | C000310        | LPM2025    | Poster Session 2 | 1       | 1                         | Fujiki    | Hiromu     | In-line measurement of laser-processed shapes using optical interferometry and feedback control of shaped beams                |
| 10 | P-55       | C000035        | LPM2025    | Poster Session 2 | 1       | 1                         | Yang      | Yongting   | Qualification of an automatic laser beam focus monitoring implemented on a new ultrashort pulsed laser robot system            |
| 11 | P-56       | C000161        | LPM2025    | Poster Session 2 | 1       | No Submission             | Kim       | Ji Hun     | Study on non-contact temperature measurement using optical wavefront in a laser-induced heating system                         |
| 12 | P-57       | C000311        | LPM2025    | Poster Session 2 | 1       | 1                         | Iwasaki   | Daiki      | Decoration of amyloid beta aggregation with elongating microtubule for optical microscopy                                      |
| 13 | P-59       | C000113        | LPM2025    | Poster Session 2 | 1       | 1                         | Takaichi  | Takeshi    | Assessment of cell type by statistical analysis of the white-light scattering spectrum of living cells                         |
| 14 | P-60       | C000206        | LPM2025    | Poster Session 2 | 1       | 1                         | Ueda      | Koh        | Wound healing assay using high-power picosecond microchip laser and low numerical aperture objective lens                      |
| 15 | P-61       | C000273        | LPM2025    | Poster Session 2 | 1       | 1                         | Oe        | Wataru     | White-light scattering spectroscopy for intracellular structural analysis using a microfluidic platform                        |
| 16 | P-62       | C000274        | LPM2025    | Poster Session 2 | 1       | 1                         | Nakata    | Wataru     | White-light scattering spectrum measurement for machine learning diagnosis of cells in cytology specimens                      |
| 17 | P-65       | C000112        | LPM2025    | Poster Session 2 | 1       | No Submission             | Takahashi | Koichi     | In-system optimization of computer-generated holograms using laser-induced plasma emission                                     |
| 18 | P-68       | C000048        | LPM2025    | Poster Session 2 | 1       | 1                         | Yamaguchi | Naoto      | One-step fabrication of graphitic carbon structure with an insulating coating by femtosecond laser pulse irradiation           |
| 19 | P-69       | C000267        | LPM2025    | Poster Session 2 | 1       | 1                         | Nakashima | Kenichi    | Observation of microhole on soda lime glass formed by different wavelengths of femtosecond laser                               |
| 20 | P-71       | C000170        | LPM2025    | Poster Session 2 | 1       | No Submission             | Takahashi | Miyu       | Fluence dependence of crystallinity changes in PEEK induced by ultrashort pulse laser  |
| 21 | P-72       | C000184        | LPM2025    | Poster Session 2 | 1       | 1                         | Matsumoto | Moeka      | Analysis of femtosecond laser impulse in lysozyme solution using atomic force microscope                                       |
| 22 | P-73       | C000219        | LPM2025    | Poster Session 2 | 1       | 1                         | Matsumoto | Hiroki     | Investigation of the Generation and Propagation Processes of Femtosecond Laser-Induced Stress Waves in Glass                   |
| 23 | P-74       | C000237        | LPM2025    | Poster Session 2 | 1       | 1                         | Shinya    | Kohei      | 400 nm Femtosecond Laser-driven Shock Compression of Silicon   |
| 24 | P-75       | C000238        | LPM2025    | Poster Session 2 | 1       | 1                         | Yamaguchi | Kazuma     | Dry Laser Peening of Magnesium Alloy using 400 nm Femtosecond Laser Pulses   |
| 25 | P-78       | C000028        | LPM2025    | Poster Session 2 | 1       | 1                         | Lemm      | Philipp    | Surface Engineering of High-Entropy Alloy Nanoparticles via ns-UV Laser for Enhanced Water Splitting and Fuel Cell Performance |
| 26 | P-79       | C000038        | LPM2025    | Poster Session 2 | 1       | 1                         | Koch      | Nico       | UV-laser-induced surface modifications in catalyst design: insights into structure-activity correlations via UV-PUDEL          |
| 27 | P-80       | C000135        | LPM2025    | Poster Session 2 | 1       | 1                         | Fujii     | Norifumi   | Laser ablation-induced crystallization of ice under patterned irradiation  |

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|----|------|---------|---------|------------------|---|---|-----------|--------------|--|
| 28 | P-81 | C000138 | LPM2025 | Poster Session 2 | 1 | 1 | Fushimoto | Wataru       | Spatiotemporal control of crystal nucleation and growth of fullerene via focused laser beam                                |
| 29 | P-83 | C000087 | LPM2025 | Poster Session 2 | 1 | 1 | Narz      | Wiebke       | Photoluminescence of surfactant-free gold-silver alloy nanoclusters fabricated by laser fragmentation in liquids           |
| 30 | P-84 | C000137 | LPM2025 | Poster Session 2 | 1 | 1 | Majima    | Ryotaro      | Preliminary study on the growth enhancement of calcium oxalate crystals using focused laser beam                           |
| 31 | P-89 | C000095 | LPM2025 | Poster Session 2 | 1 | 1 | Nishimoto | Masaharu     | Effects of wavelength on NV center formation in diamond via femtosecond laser irradiation                                  |
| 32 | P-02 | C000284 | LPM2025 | Poster Session 1 | 1 | 1 | Sato      | Mai          | Analysis of Laser-induced Periodic Surface Structures on Titanium Using Ultraviolet Femtosecond Laser                      |
| 33 | P-04 | C000210 | LPM2025 | Poster Session 1 | 1 | 1 | Kawabata  | Shota        | Control of microbial growth using Ti surfaces microstructured by GHz burst mode femtosecond laser                          |
| 34 | P-05 | C000287 | LPM2025 | Poster Session 1 | 1 | 1 | Iga       | Shunya       | Structure prediction using light scattering patterns of laser-induced periodic nanostructures with deep learning           |
| 35 | P-07 | C000216 | LPM2025 | Poster Session 1 | 1 | 1 | Mortha    | Prem Dheeraj | Multiscale modelling of ultrafast laser heating of Gold using Two-Temperature Model coupled with Molecular Dynamics        |
| 36 | P-09 | C000194 | LPM2025 | Poster Session 1 | 1 | 1 | Aiyyzhy   | Kuder        | Laser-assisted production of boron nanoparticles and their use as an additive in composite fuel                            |
| 37 | P-12 | C000031 | LPM2025 | Poster Session 1 | 1 | 1 | Franz     | Daniel       | Ultrashort pulsed laser drilling of through-glass vias for glass core packaging  |
| 38 | P-13 | C000176 | LPM2025 | Poster Session 1 | 1 | 1 | Deng      | Jiatao       | Investigation of the thermal effects in soft tissue drilling using short-pulse CO <sub>2</sub> lasers                      |
| 39 | P-15 | C000191 | LPM2025 | Poster Session 1 | 1 | 1 | Irie      | Shun         | Machine Learning of Optimal Processing Conditions in Ultrafast Laser Welding of Glass Based on Laser Emission State        |
| 40 | P-18 | C000044 | LPM2025 | Poster Session 1 | 1 | 1 | Yu        | Min-Chieh    | Dual-Functional Microwire ITO Heater and Sensor Fabricated by Laser Micromachining   |
| 41 | P-19 | C000205 | LPM2025 | Poster Session 1 | 1 | 1 | Sasahara  | Taiga        | Patterning properties of copper-based electrodes fabricated by GHz burst femtosecond laser sintering of copper powders     |
| 42 | P-20 | C000281 | LPM2025 | Poster Session 1 | 1 | 1 | Hosokawa  | Tomoya       | Shaping six-beam interference patterns of a variable-wavelength laser using a spatial light modulator                      |
| 43 | P-22 | C000275 | LPM2025 | Poster Session 1 | 1 | 1 | Someta    | Yuuki        | In-process monitoring of photocurrent of photodetector during holographic femtosecond laser surface structuring            |
| 44 | P-25 | C000177 | LPM2025 | Poster Session 1 | 1 | 1 | Sadauskas | Modestas     | Dielectric resonator antenna formation on ceramic cylinder with SSAIL technology   |
| 45 | P-28 | C000065 | LPM2025 | Poster Session 1 | 1 | 1 | Matsumoto | Sota         | Femtosecond Laser Fabrication of large-scale 3D microfluidic chips made of transparent fluoropolymer CYTOP                 |
| 46 | P-29 | C000140 | LPM2025 | Poster Session 1 | 1 | 1 | Shimizu   | Keito        | Oleophobic Biomimetic Film with Filefish-inspired Surface via Laser Mold Imprinting  |
| 47 | P-30 | C000148 | LPM2025 | Poster Session 1 | 1 | 1 | Ishimura  | Hiromu       | Prediction Model for 3D Surface Geometry in Femtosecond-pulsed Laser Microfabrication Using Deep Learning                  |
| 48 | P-31 | C000214 | LPM2025 | Poster Session 1 | 1 | 1 | Mashiko   | Shoto        | Integrated three electrodes fabricated by femtosecond laser direct writing for flexible electrochemical sensors            |
| 49 | P-32 | C000309 | LPM2025 | Poster Session 1 | 1 | 1 | Koyama    | Keiichiro    | Building of microtubule and kinesin system with metabolism and motility  |
| 50 | P-35 | C000212 | LPM2025 | Poster Session 1 | 1 | 1 | Ishida    | Hiroya       | Size effects of silicon carbide nanoparticles on high-repetition green femtosecond laser pulse-induced reductive sintering |
| 51 | P-36 | C000046 | LPM2025 | Poster Session 1 | 1 | 1 | Min-Yang  | Chen         | Laser dewetting-induced metal particles and their antimicrobial effects on guava scab pathogen                             |
| 52 | P-38 | C000256 | LPM2025 | Poster Session 1 | 1 | 1 | Nakatani  | Masashi      | Analysis of molten metal flow in keyhole welding using a high-power disk laser   |
| 53 | P-42 | C000321 | LPM2025 | Poster Session 1 | 1 | 1 | Kawasaki  | Kasumi       | Flat-top beam shaping with extended depth of focus using a spatial light modulator   |
| 54 | P-43 | C000276 | LPM2025 | Poster Session 1 | 1 | 1 | Takeda    | Tomohiro     | Improving beam shaping accuracy through spatial frequency distribution control   |
| 55 | P-44 | C000172 | LPM2025 | Poster Session 1 | 1 | 1 | Kumano    | Sota         | High-efficiency precision processing of diamond through three-dimensional beam shaping                                     |