

## Poster Session

Date: Tuesday, 29 Oct 2024

Time: 17:30–19:30

P-01: Anomalous solvent-ion correlations and effective masses of positive-particles in liquids:  
Based on positron diffusion studies in liquids  
Ikuzo Kanazawa



P-02: Theoretical analysis of positronic compounds of fluorine molecular dianions using quantum Monte Carlo method  
Kentaro Numata



P-03: Hydrogen-induced vacancy formation in austenitic stainless steel with high Ni equivalent  
Takahito Sano



P-04: Near-surface defects in hydrogen-charged polished austenitic stainless steel  
Hirotaka Hamada



P-05: Aggregation process of hydrogen-induced vacancies into vacancy clusters in metastable austenitic stainless steel  
Yuta Kikuchi



P-06: Vacancy-type defects just below the intergranular fracture surface of Ni by positron probe microanalyzer  
Honoka Abe

P-07: Change in vacancies during sintering of additive-manufactured SUS316L objects elucidated by PAL technique  
Keita Kobayashi



P-08: Hydrogen-induced defects in pure iron by operando positron annihilation lifetime spectroscopy during hydrogen charge and straining  
Kodai Yamamoto

P-09: Comparison of various types of hydrogenated amorphous carbon films formed by plasma-based ion implantation  
Atsushi Kinomura

P-10: Structural, morphological, and photothermal properties of Fe<sub>3</sub>O<sub>4</sub> nanoparticles and their applications for antibacterial activities  
Jiandang Liu

P-11: Study of open volume defects in TiO<sub>2</sub> nano/powders and sintered ceramic  
Oksana Melikhova

P-12: Effect of the particle size on gamma-ray induced positron annihilation lifetime of CeO<sub>2</sub> nanoparticles  
Satoru Dohshi



P-13: Effect of Sb doping on Mg<sub>2</sub>Sn crystals studied by gamma-induced-positron annihilation lifetime spectroscopy and photoelectron holography experiments  
Takuma Sumi

P-15: Synergistic suppression of bipolar effect and lattice thermal conductivity leading to high average figure of merit in Bi<sub>0.4</sub>Sb<sub>1.6</sub>Te<sub>3</sub> materials through alloying with AgSbTe<sub>2</sub>  
Xiang Qu



P-16: TwinPALS: A digital twin for laboratory-based positron annihilation lifetime spectroscopy

Dominik Boras



P-17: A simulation study on polymer-like PALS spectra with TwinPALS

Dominik Boras

P-18: Development of a high intensity positronium pulse

Masaki Maekawa

P-19: CANCELLED

P-20: Development of an ISO technical specification for evaluation of pore size in materials via the PAL technique

Brian O'Rourke



P-21: Measurements of positronium transmittance through graphene films supported on TEM grid

Riki Mikami



P-22: Microwave spectroscopy of the  $2\ ^3S_1 \rightarrow 2\ ^3P_1$  fine structure interval in positronium

Krzysztof Haddas

P-23: Measurement of the transmittance of slow positrons through a single-layer graphene film

Yuhi Sada



P-24: Calculation of photodissociation cross sections of positronium hydride and positronium molecule

Naoki Kamiya



P-25: Benchmarking neural network wave functions in positronium

Shuhei Ohno

P-26: Electron-positron momentum distributions to unveil carbon-redox orbital interactions in  $\text{LiCoO}_2$  cathodes

Jan Kuriplach

P-27: Hyperfine coupling constants of OH radical in liquid water

Tetsuya Hirade



P-28: Study of supercritical carbon dioxide interacted with clay minerals

Yasushi Takashita



P-29: Depth-resolved porosity elucidation of bilayer silica films using the energy-variable positron lifetime technique

Shigeru Yoshimoto

P-30: Several issues on positronium formation and annihilation in metal organic frameworks (MOFs)

Chunqing He

P-31: Thermal degradation at the near surface of nylon 66 evaluated by Energy-variable PALS

Hiroyuki Hosomi



P-32: Study of local structure of magnesium oxide associated with direct air capture of carbon dioxide from atmosphere

Eri Inoue

P-33: Kaolin loaded chitosan nanofibers as an efficient adsorbent for palladium cations  
Yijun Du

P-34: The o-Ps quenching properties of chitosan and 2-pyridyliminechitosan supported palladium nanofibers  
Linjun Shao

P-36: Positron annihilation lifetime spectrum analysis of interfacial compatibility of nano-composited epoxy resin  
Yue Yang

P-37: Change of chemical structure measured by positron probe microanalyzer  
Toshitaka Oka



P-38: Energy-tunable positronium beam transportation experiment using by silica glass capillaries  
Omi Miyauchi

P-39:  $\langle Z_{\text{eff}} \rangle$  sensitivity to uncertainty in elastic  $e^+$  cross section  
Gregory Boyle



P-40: Influence of relative humidity on CO<sub>2</sub> capture in CALF-20 MOFs using positron annihilation lifetime spectroscopy  
Ahmed G. Attallah