2014年度 宇宙環境研究グループ国際会議講演

"Wood-based, diamond-like carbon for improved resistance against atomic oxygen", Takeshi Kajimoto, Toshimitsu Hata, Masahito Tagawa, Hirotsugu Kojima, Hajime Hayakawa, 11th International Conference on Protection of Materials and Structures from Space Environment, May 19 – 23, 2014, Lijiang, China

"Atomic oxygen beam irradiation effect on the Si-doped DLC film", Kengo Kidena, Minami Endo, Ryo Imai, Masahito Niibe, Kumiko Yokota, Masahito Tagawa, Kazuhiro Kanda, The 15th IUMRS-International Conference in Asia (IUMRS-ICA 2014), August 24-30, 2014 Fukuoka, Japan

"Ground-based neutral gas environment simulation related to material degradation phenomena in the orbital altitudes of 200-500 km", Masahito Tagawa, Takashi Oyabu, Junki Ohira, Daiki Watanabe, Yuki Yamasaki, Kumiko Yokota, COSPAR Scientific Assembly, August 2-10, 2014, Moscow, Russia, **Plenary**.

"Extreme ultraviolet emission from laser-induced plasma relevance to neutral gas environment simulation in LEO", Masahito Tagawa, Junki Ohira, Daiki Watanabe, Yugo Kimoto, Hiroaki Nishimura, Kumiko Yokota, COSPAR Scientific Assembly, August 2-10, 2014, Moscow, Russia.

"Atomic oxygen beam irradiation effect on the Si-doped hydrogenated DLC film", Kengo Kidena, Minami Endo, Hiroki Takamatsu, Ryo Imai, Masahito Niibe, Kumiko Yokota, Masahito Tagawa, Kazuhiro Kanda, International Union of Materials Research Societies- (IUMRS2014), Fukuoka, Japan. August 24-30, 2014.

"Formation of protective oxide film on metal-doped diamond-like carbon films by hyperthermal Oatom collision in LEO space environment", Kumiko Yokota, Daiki Watanabe, Akimine Hatsuda, Akitaka Yoshigoe, Yuden Teraoka, Masahito Tagawa, 30th European Conference on Surface Science, Antalya, Turkey, August 31-September 5, 2014.

"Reduction of extreme ultraviolet emission from laser-induced oxygen plasma for atom-surface interaction studies in a simulated space environment", Masahito Tagawa, Junki Ohira, Yugo Kimoto, Hiroaki Nishimura, Kumiko Yokota, 30th European Conference on Surface Science, Antalya, Turkey, August 31-September 5, 2014.

"Formation of ultra-thin oxide film at Si(001) by well-characterized hyperthermal broad oxygen atom beam exposed at room temperature", Masahito Tagawa, Kumiko Yokota, Akitaka Yoshigoe, Yuden Teraoka, 13th European Vacuum Conference, Aveiro, Portugal, September 8-12, 2014.

"Protection of materials from O-atom collision in low Earth orbit using thin oxide film grown in space", Kumiko Yokota, Akitaka Yoshigoe, Yuden Teraoka, Kazuhiro Kanda, Yuichi Furuyama, Koji Matsumoto, Masahito Tagawa, 13th European Vacuum Conference, Aveiro, Portugal, September 8-12, 2014.

"Hyperthermal collision of O-atom on metal-doped diamond-like carbon films: effect of collision energy on the formation of protective oxide films", Daiki Watanabe, <u>Akimine Hatsuda</u>, Yuichi Furuyama, Kazuhiro Kanda, Akitaka Yoshigoe, Yuden Teraoka, Kumiko Yokota, Masahito Tagawa, VASSCAA-7, Hsinchu, Taiwan ROC, October 5-9, 2014.

"Use of space-qualified quartz crystal microbalance for non-retrieval material tests in space", Kenta Ide, Yuki Yamasaki, Kazutaka Nishiyama, Masahito Tagawa, Kumiko Yokota, VASSCAA-7, Hsinchu, Taiwan ROC, October 5-9, 2014.

"Extreme ultraviolet emission from a laser-driven mixed gas plasma relevance to sub-low Earth orbit space environmental effect studies", Junki Ohira, Takashi Oyabu, Yugo Kimoto, Hiroaki Nishimura, Kumiko Yokota, Masahito Tagawa, VASSCAA-7, Hsinchu, Taiwan ROC, October 5-9, 2014.

"Importance of the hyperthermal (8km/s) gas/surface interactions in a complicated space environment for future spacecraft development", Kumiko Yokota, Masahito Tagawa, VASSCAA-7, Hsinchu, Taiwan ROC, October 5-9, 2014.