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*"Investigation into tolerance of polysiloxane-block-polyimide film against atomic oxygen"* Eiji Miyazaki, Masahito Tagawa, Kumiko Yokota, Rikio Yokota, Yugo Kimoto, Junichiro Ishizawa, *Acta Astronautica* Vol.66 No.5-6 (2010) pp.922-928.

*"Effect of ultraviolet emission from the oxygen plasma on the accelerated erosion phenomenon of fluorinated polymer in the atomic oxygen ground tests"*, Masahito Tagawa, Kumiko Yokota, Kazuhiro Kishida, Akio Okamoto, Jun-ichiro Ishizawa, Timothy K. Minton, *High Performance Polymers* Vol.22 No.2 (2010) pp.213-224.

*"Degradation property of commercially available Si-containing polyimide in simulated atomic oxygen and VUV environments for low Earth orbit"*, Kumiko Yokota, Shingo Abe, Masahito Tagawa, Minoru Iwata, Eiji Miyazaki, Jun-ichiro Ishizawa, Yugo Kimoto, Rikio Yokota, *High Performance Polymers*, Vol.22 No.2 (2010) pp.237-251.

*"Synchrotron radiation photoelectron spectroscopy and near-edge x-ray absorption fine structure study on oxidative etching of diamond-like carbon films by hyperthermal atomic oxygen"*, Masahito Tagawa, Kumiko Yokota, Akira Kitamura, Koji Matsumoto, Akitaka Yoshigoe, Yuden Teraoka, Kazuhiro Kanda, Masahito Niibe, *Applied Surface Science*, Vol. 256 No.24 (2010) 7678-7683.

*"A Consideration of Future Flight Material Exposure Experiments in Japan: Advanced Material Exposure Test Working Group's Proposal"*, Masahito Tagawa, Kumiko Yokota, Mengu Cho, Minoru Iwata, Rikio Yokota, Mineo Suzuki, Koji Matsumoto, Yugo Kimoto, Eiji Miyazaki, Hiroyuki Shimamura, *Transactions of the Japan Society for Aeronautical and Space Sciences, Space Technology Japan*, Vol. 8, No. ists27 (2010) pp.Th\_1-Th\_5

*"Mechanistic studies of atomic oxygen reactions with polymers and combined effects with vacuum ultraviolet light"*, Masahito Tagawa, Timothy K. Minton, *MRS Bulletin*, Vol.35, No.1 (2010) 35-40.

*"Energy dependence of hyperthermal oxygen atom erosion of a fluorocarbon polymer: relevance to space environmental effect"*, Masahito Tagawa, Kumiko Yokota, Kazuhiro Kishida, Akio Okamoto, Timothy K. Minton, *ACS Advanced Materials and Interfaces*, Vol.2, No.7 (2010) pp.1866-1871.

*"原子状酸素に対する木質炭素／シリコン材料の抵抗性"*, 梶本武志、畑俊充、田川雅人、小嶋浩嗣、今村祐嗣、早川基、上田義勝、山川宏、*高温学会誌* (2010) Vol.36, No.4 (2010) 185-191.