

【Abstract of 2009 Grant – in – Aid for Scientific Research on Innovative Areas  
(Research in a proposed research area)】

<b>Title of project</b>	Frontier science of interactions between plasmas and nano-interfaces
<b>Head Investigator Name</b>	SHIRATANI Masaharu, Kyushu University, Faculty of Information Science and Electrical Engineering, Professor
<b>Abstract of Research Project</b>	Plasma-based fabrication of nanomaterials and nanostructures is widely employed for top-down processes such as ULSI processing as well as bottom-up processes such as carbon nanotube production. This research project explores frontier science of interactions between plasmas and nano-interfaces by focusing on novel features such as fluctuations of interactions due to the nanometer scale. Plasma processing based on the science realizes highly precise top-down processes by suppressing fluctuations and well controlled self-organized bottom-up processes by controlling fluctuations. This project aims to bring about an explosive development of fabrication technologies of nanomaterials and nanostructures.
<b>Term of Project: 2009–2013</b>	