

# The 2nd Plasma Materials Science Hall of Fame Prize

was awarded to

**Prof. Kunihide Tachibana,**

Kyoto University,

for the excellent achievements in the fields of microplasmas as well as plasma processes and their diagnostics, and the tremendous contributions to the international plasma materials science community



**Prof. Kunihide Tachibana,**  
Kyoto University

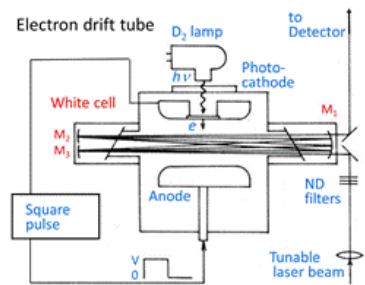
## From basic parameters to diagnostics and modeling of plasmas

1968

### Researches on light sources

Gas lasers

Discharge lamps

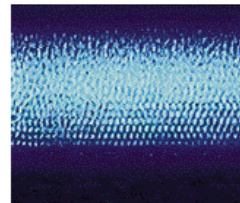
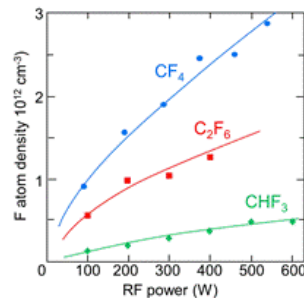


Excitation rate coefficients of metastable and resonance levels of Ne, Ar, Kr, and Xe measured by electron swarm experiments with laser absorption spectroscopy

1980

### Researches on reactive plasmas

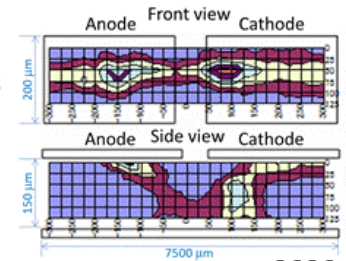
F atom densities measured by VUV laser absorption at 95 nm



Coulomb crystal formed by growing particles in CH<sub>4</sub> plasma

Plasma display panels

3D laser absorption measurement of metastable Xe atoms in a pixel of PDP



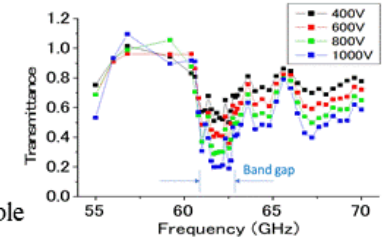
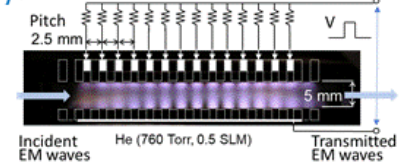
2020

### Researches on microplasmas

Microplasma arrays

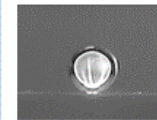
Plasma metamaterial by a 2D-array

2000



### Researches on plasma-liquid interactions

Diagnostics of RONS produced in DBD discharges



Discharge image in an underwater bubble