Octiv VI Probe

RF Measurement and Plasma Control Sensors

https://impedans.com/octiv-mono-rf-wattmeter

https://impedans.com/octiv-poly-vi-probe

https://impedans.com/octiv-suite-vi-probe

Impedans
PLASMA MEASUREMENT

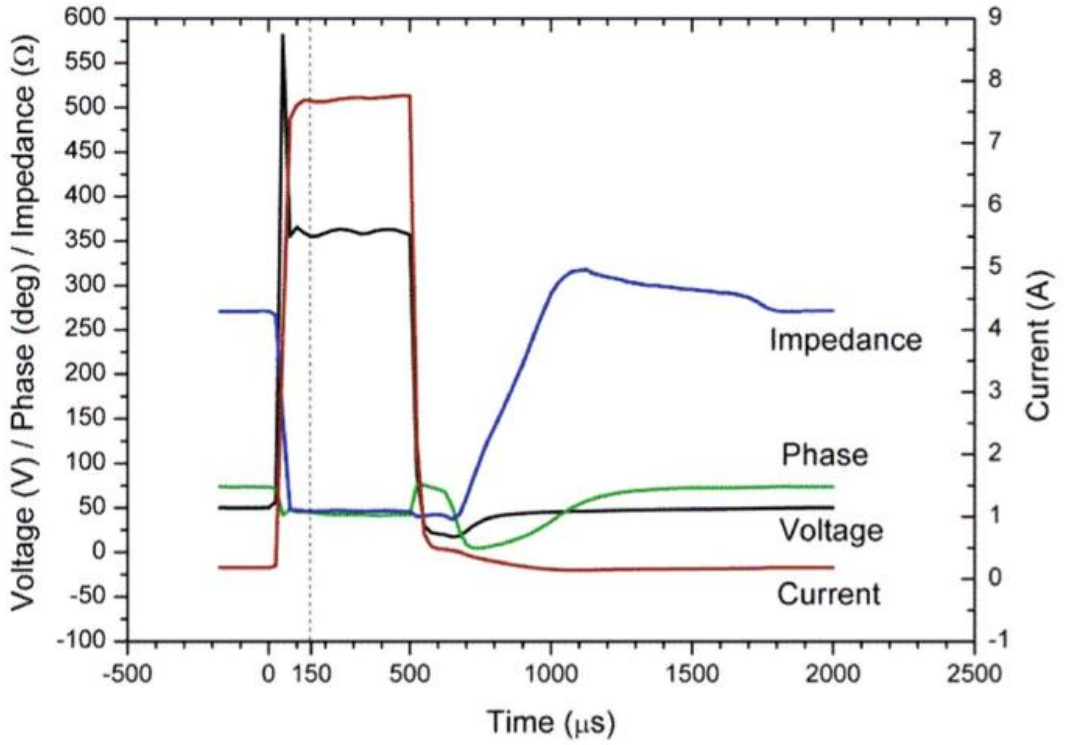
Simultaneous measurement of Current, Voltage, Impedance, Phase and Instantaneous power in an inductively coupled impulse sputtering

Plasma analysis of inductively coupled impulse sputtering of Cu, Ti and Ni

DOI: https://doi.org/10.1088/1361-6595/aa6f79

The objective of this paper was to investigate the ionization mechanisms in an Inductively coupled impulse sputtering (ICIS) system and to demonstrate how the ionization relates to the power input to the coil and the operating pressures.

Some example data is shown to the right.



Temporal evolution of the waveforms for an ICIS of Titanium discharge.

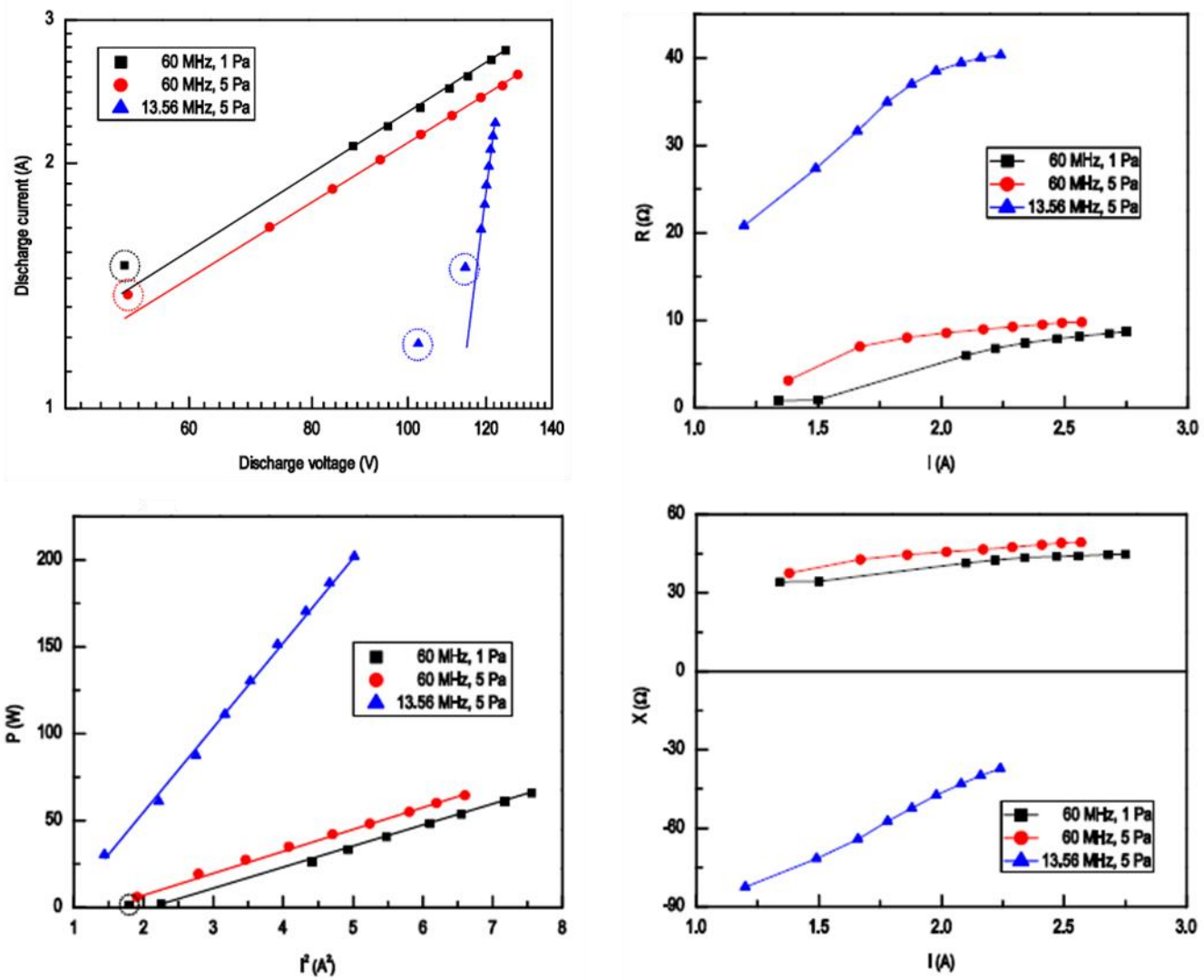
Electrical characteristics of VHF magnetron discharge by V–I probe measurement

Ion property and electrical characteristics of 60MHz very-high frequency magnetron discharge at low pressure

DOI: https://doi.org/10.1088/2058-6272/aad379

In this work, a pre-ionized 60 MHz very-high-frequency (VHF) magnetron discharge assisted by inductively coupled plasma (ICP) discharge was developed. The electrical characteristics of discharge were investigated by voltage–current probe technique.

Some example data is shown to the right.



The electric characteristics of the VHF magnetron discharge analyzed by V–I probe measurement.

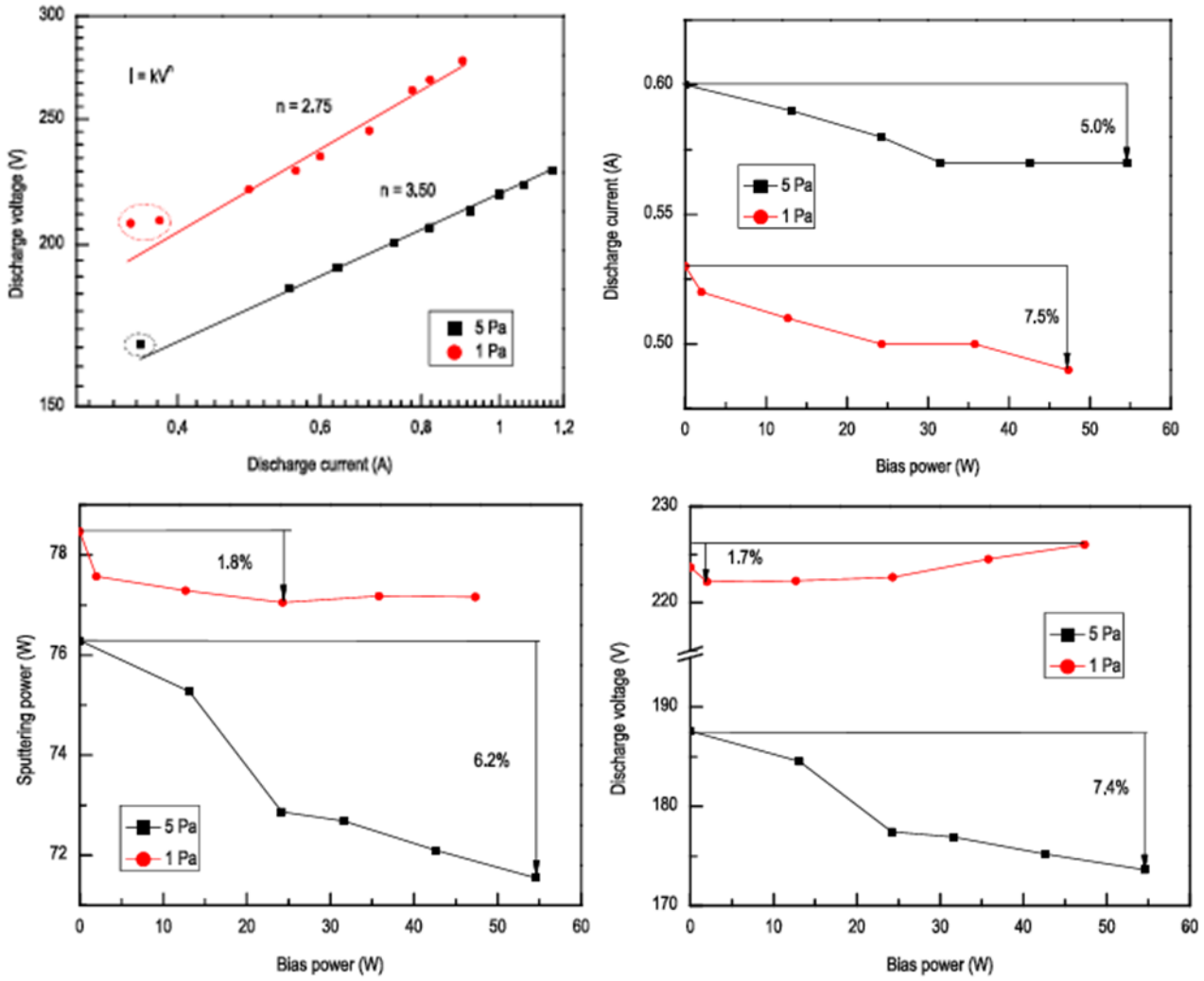
Investigation of 2 MHz magnetron discharge by the electric characteristics of target and bias discharges

Effect of radio-frequency substrate bias on ion properties and sputtering behavior of 2 MHz magnetron sputtering

DOI: https://doi.org/10.1088/2058-6272/aae7dd

This work investigated the effect of RF substrate bias on ion properties and sputtering behavior of 2 MHz magnetron discharge. The sputtering behavior was investigated by the electric characteristics of target and bias discharges using voltage–current (I–V) probe technique.

Some example data is shown to the right.



The electric characteristics of Ag target 2 MHz magnetron discharge.

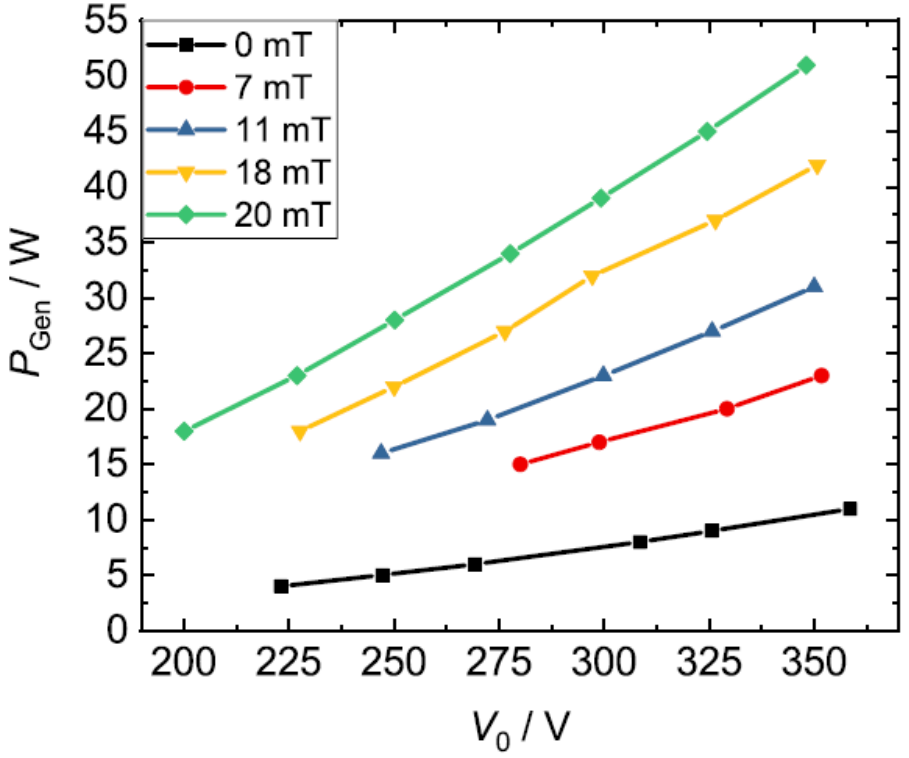
Driving voltage amplitude as control parameter to investigate Magnetic asymmetry effect (MAE) in 13.56 MHz CCP

Experimental investigations of the magnetic asymmetry effect in capacitively coupled radio frequency plasmas

DOI: https://doi.org/10.1088/1361-6595/aae199

This work reports the first experimental investigation of the Magnetic asymmetry effect (MAE) in a low-pressure discharge operated in argon at 13.56 MHz capacitively coupled plasmas (CCP). This novel method allows control of the mean ion energy at both electrodes as a function of the magnetic field configuration.

Some example data is shown to the right.



Applied generator power for the different driving voltage amplitudes and magnetic flux densities.

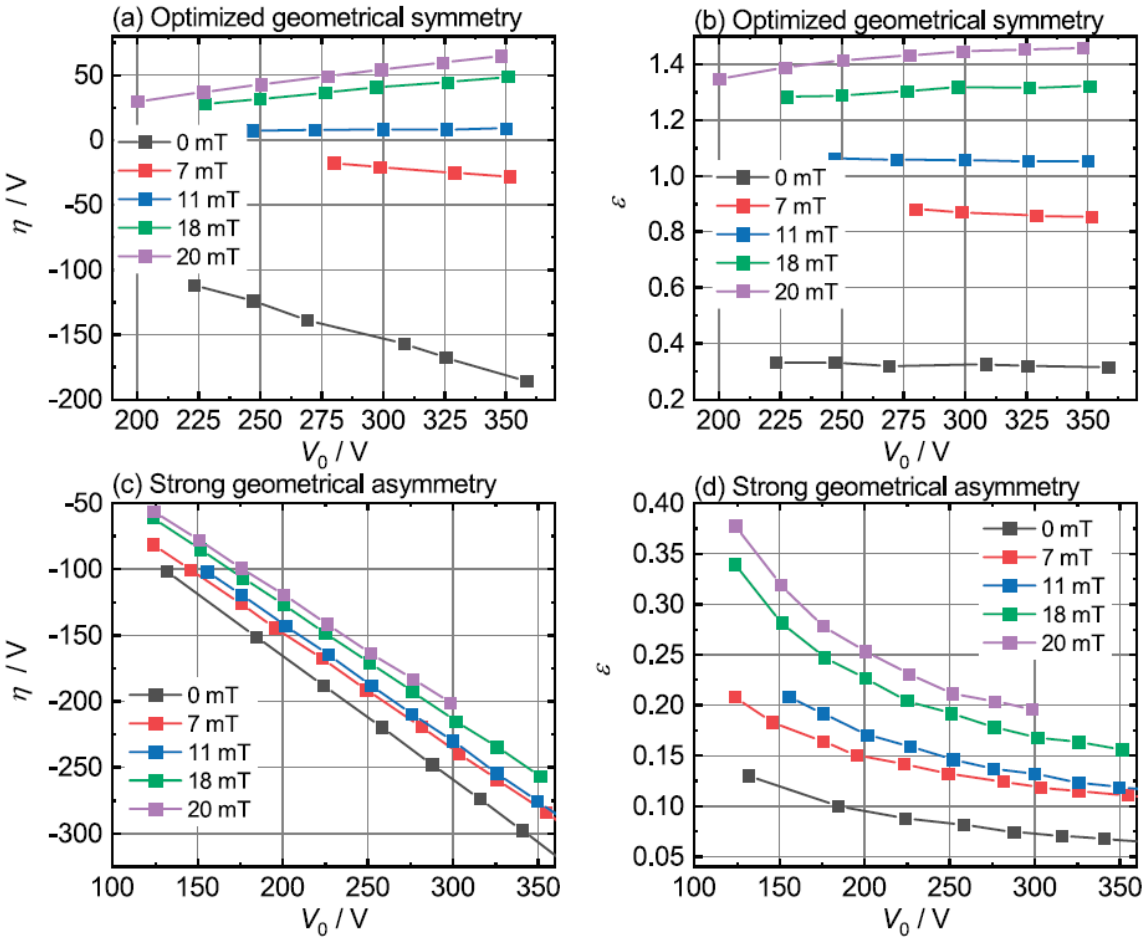
Influence of driving voltage amplitude in Ar/O_2 discharge to investigate Magnetic asymmetry effect (MAE)

The magnetic asymmetry effect in geometrically asymmetric capacitively coupled radio frequency discharges operated in Ar/O_2

DOI: https://doi.org/10.1088/1361-6595/ab9b31

In this work, the MAE is investigated experimentally in a geometrically asymmetric capacitively coupled RF discharge driven at 13.56 MHz and operated in mixtures of argon and oxygen.

Some example data is shown to the right.



DC self-bias voltage measured in a RF magnetron with optimized geometric reactor symmetry

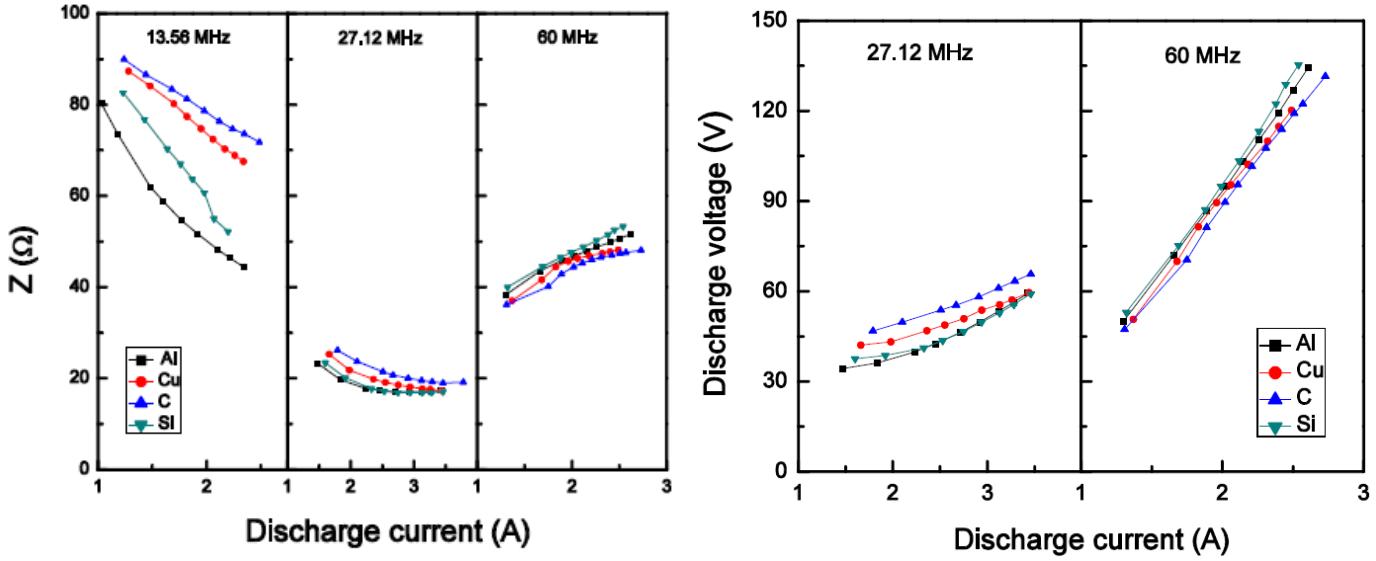
Impedance characteristics of radio frequency (RF) (13.56 and 27.12 MHz) and very high-frequency (60 MHz) magnetron discharges

Plasma Impedance Characteristics of Radio Frequency and Very High-Frequency Magnetron Discharges

DOI: https://doi.org/10.1109/TPS.2019.2958317

The objective of this paper is to investigate the impedance characteristics of RF and very high-frequency (VHF) magnetron discharges. It discusses the influence of discharge current and electron inertia effects on the discharge impedance.

Some example data is shown to the right.



Variation of discharge impedance *Z* and discharge voltage with discharge current at the frequencies of 13.56, 27.12 and 60 MHz.

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