

プラズマ科学研究室小史

A Short History of The Plasma Science Laboratory

プラズマ科学研究室

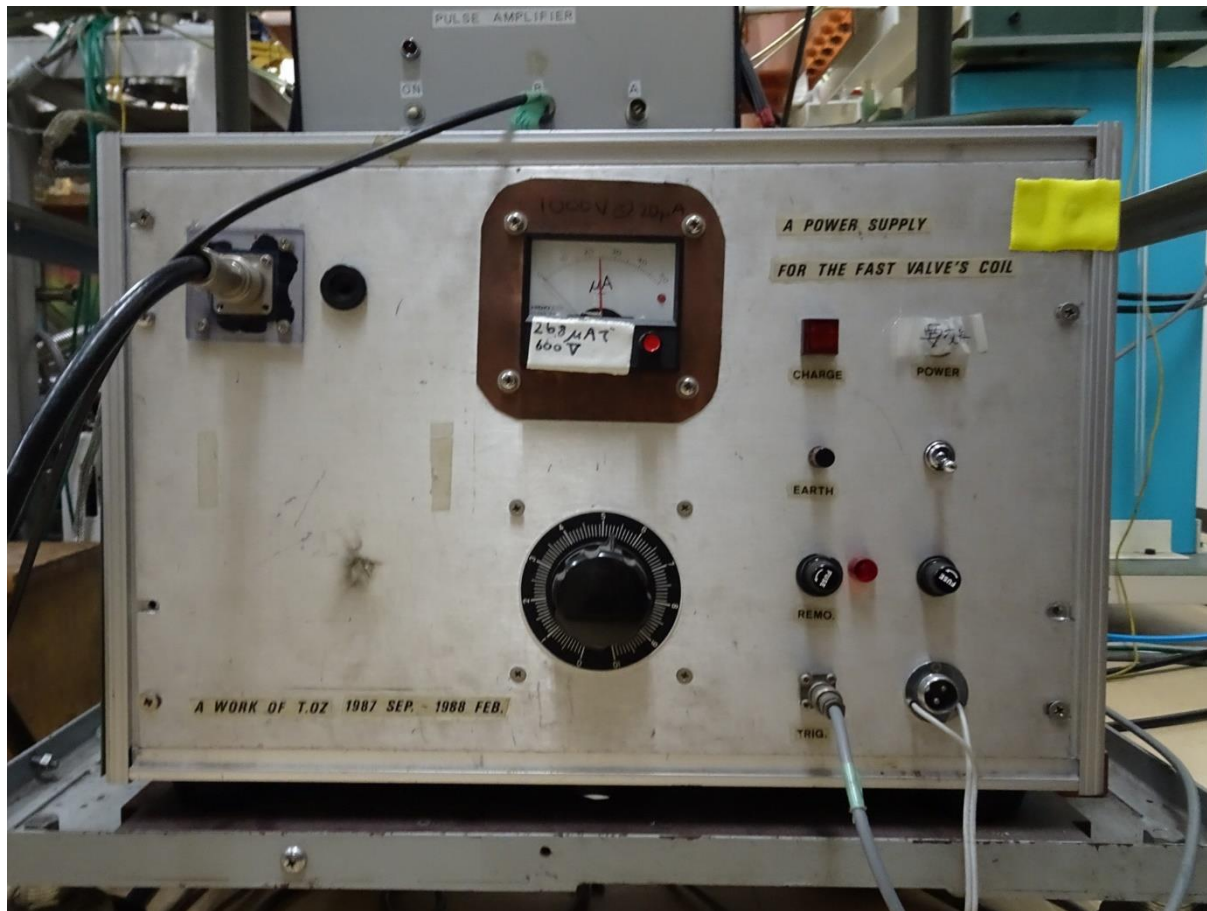
高杉恵一

ガスバルブ



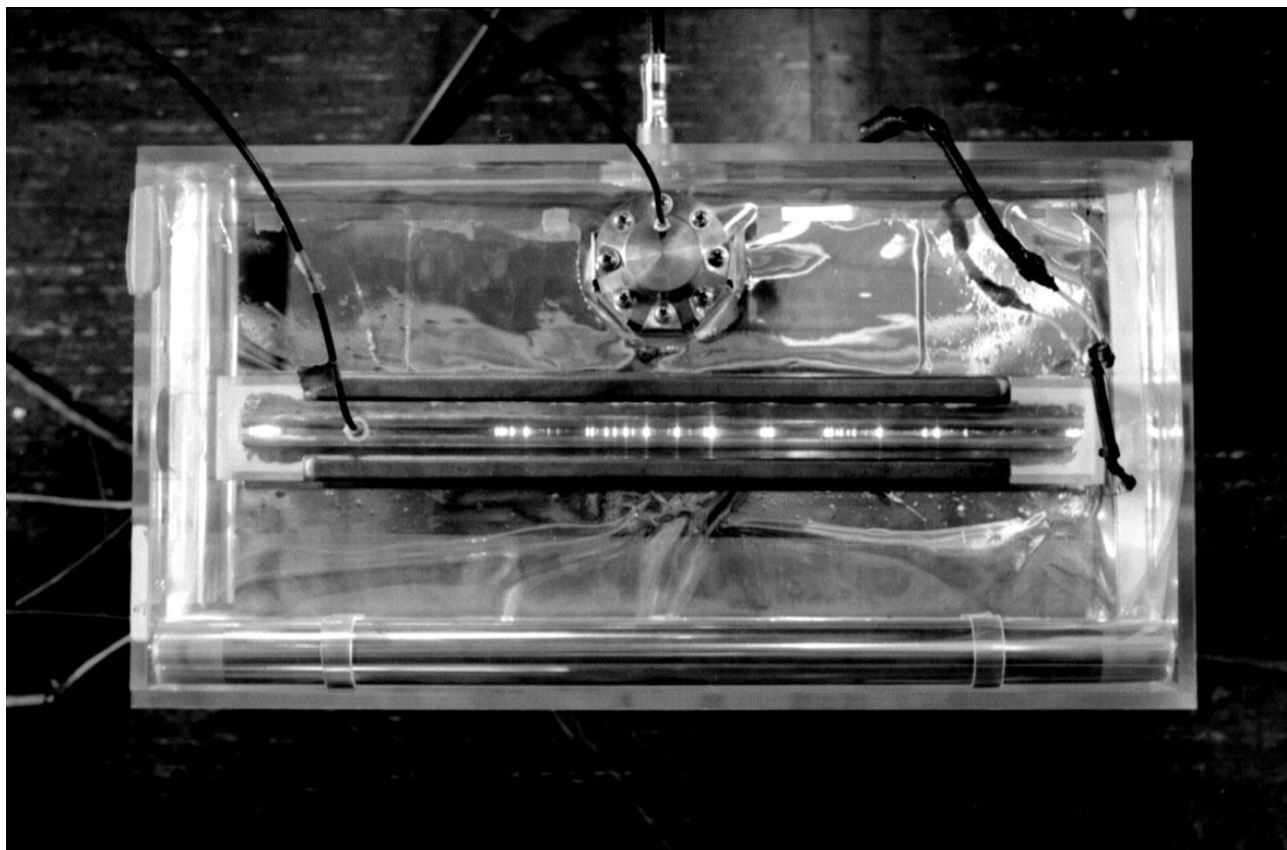
日下, 1987

ガスパフ電源



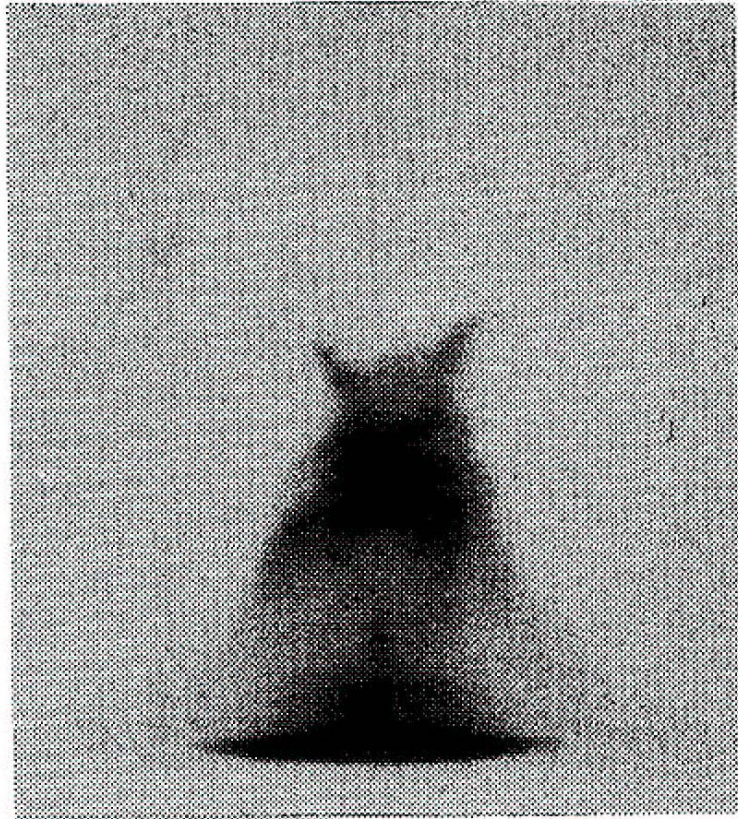
大関, 1988

N_2 レーザー



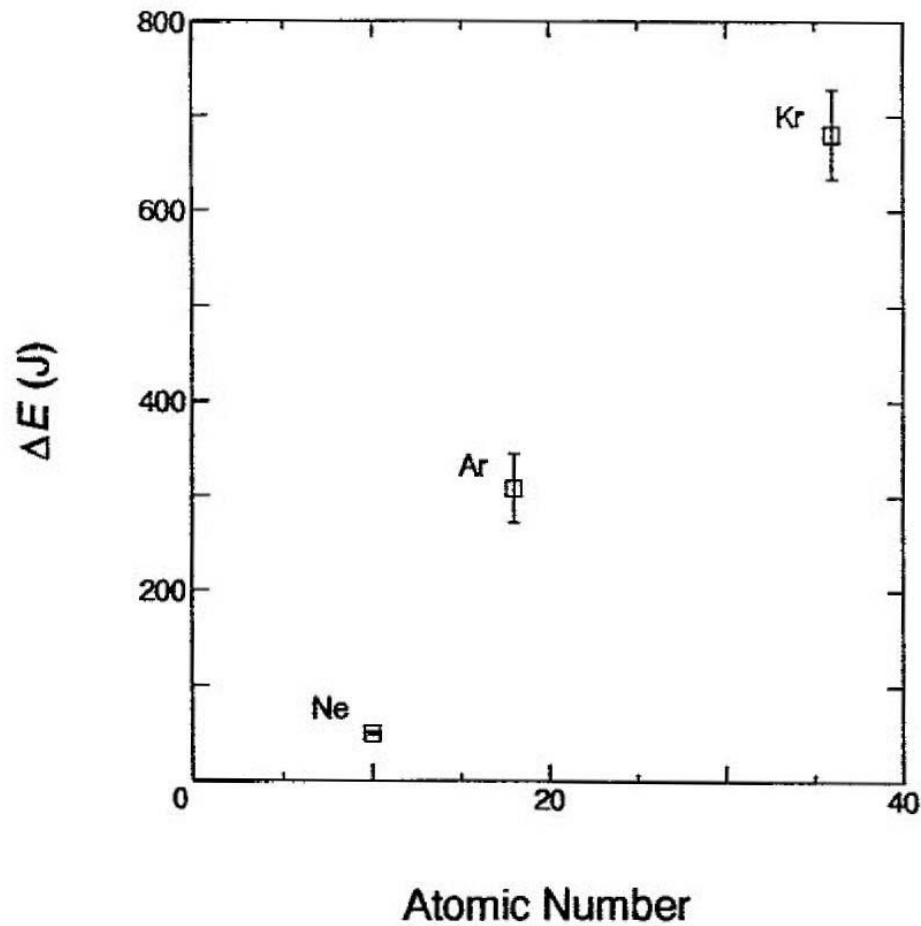
高田, 1990

ホットスポットと雲状構造



竹内, 1990

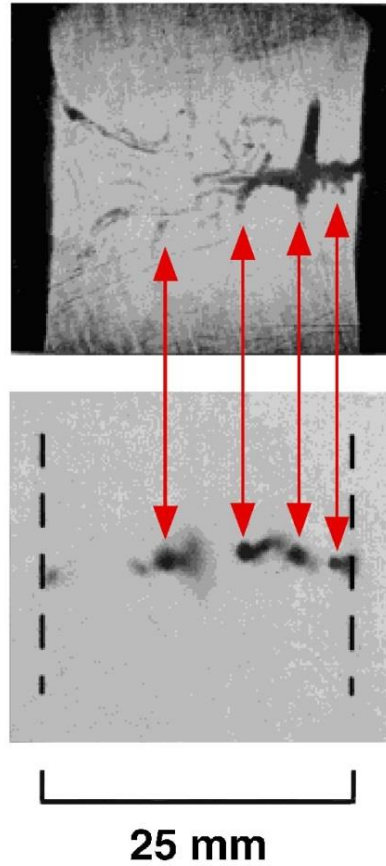
入力エネルギーの原子番号依存性



Rayleigh-Taylor不安定性

Cathode

Anode



森山, 1994

VictorさんとAllaさん



DZP 1993, London

Allaさん来訪



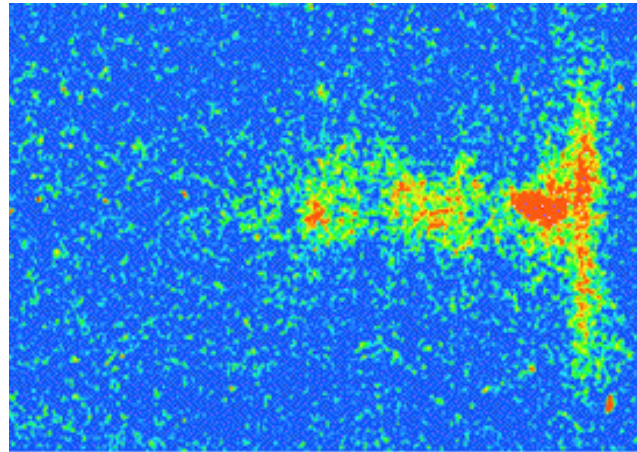
上野, 1993

凸型結晶分光測定



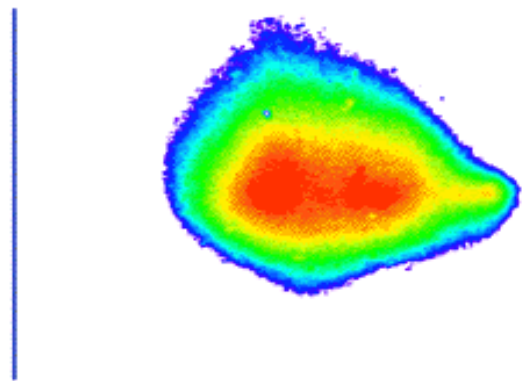
Victorさん, 1995

軟X線ミラー



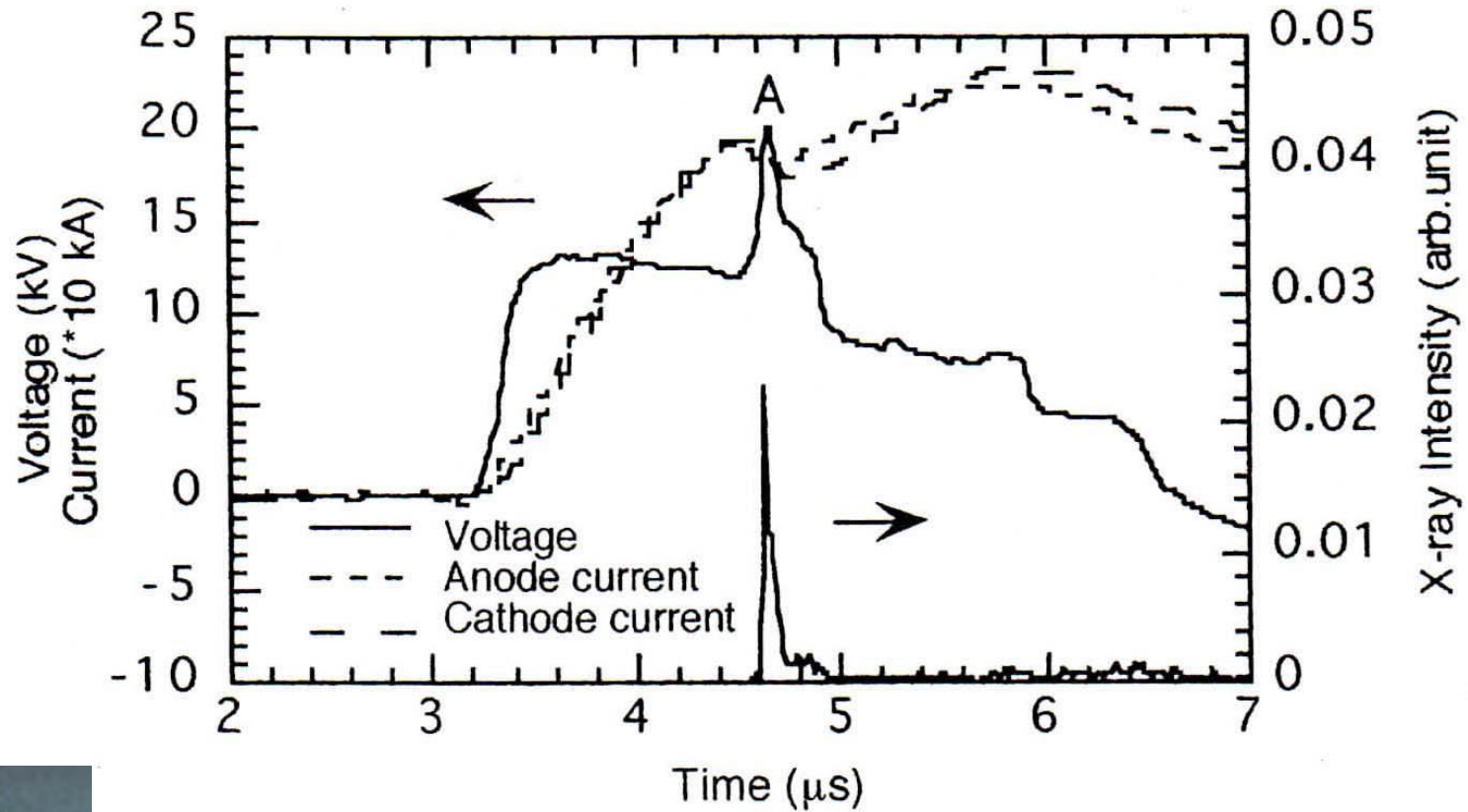
Cathode

Anode

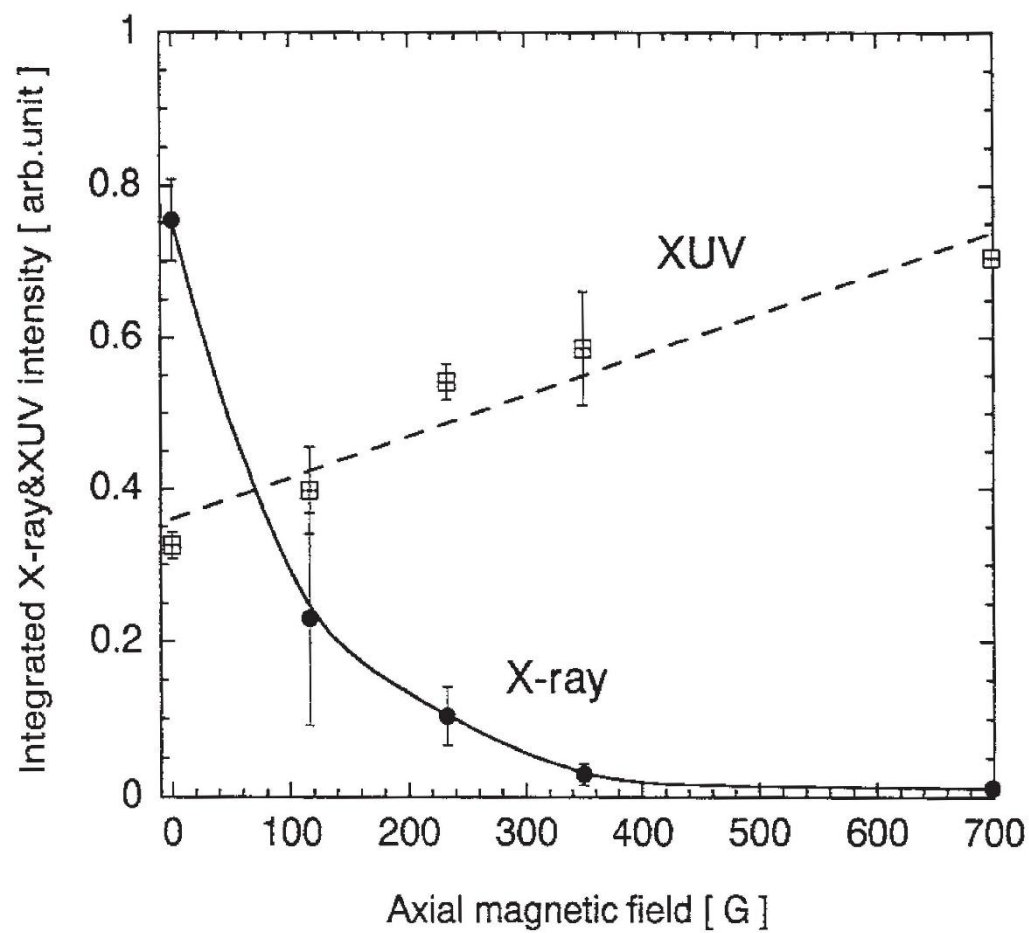


Victor Kantsyrev, 1995

放電電圧測定



縦磁場実験

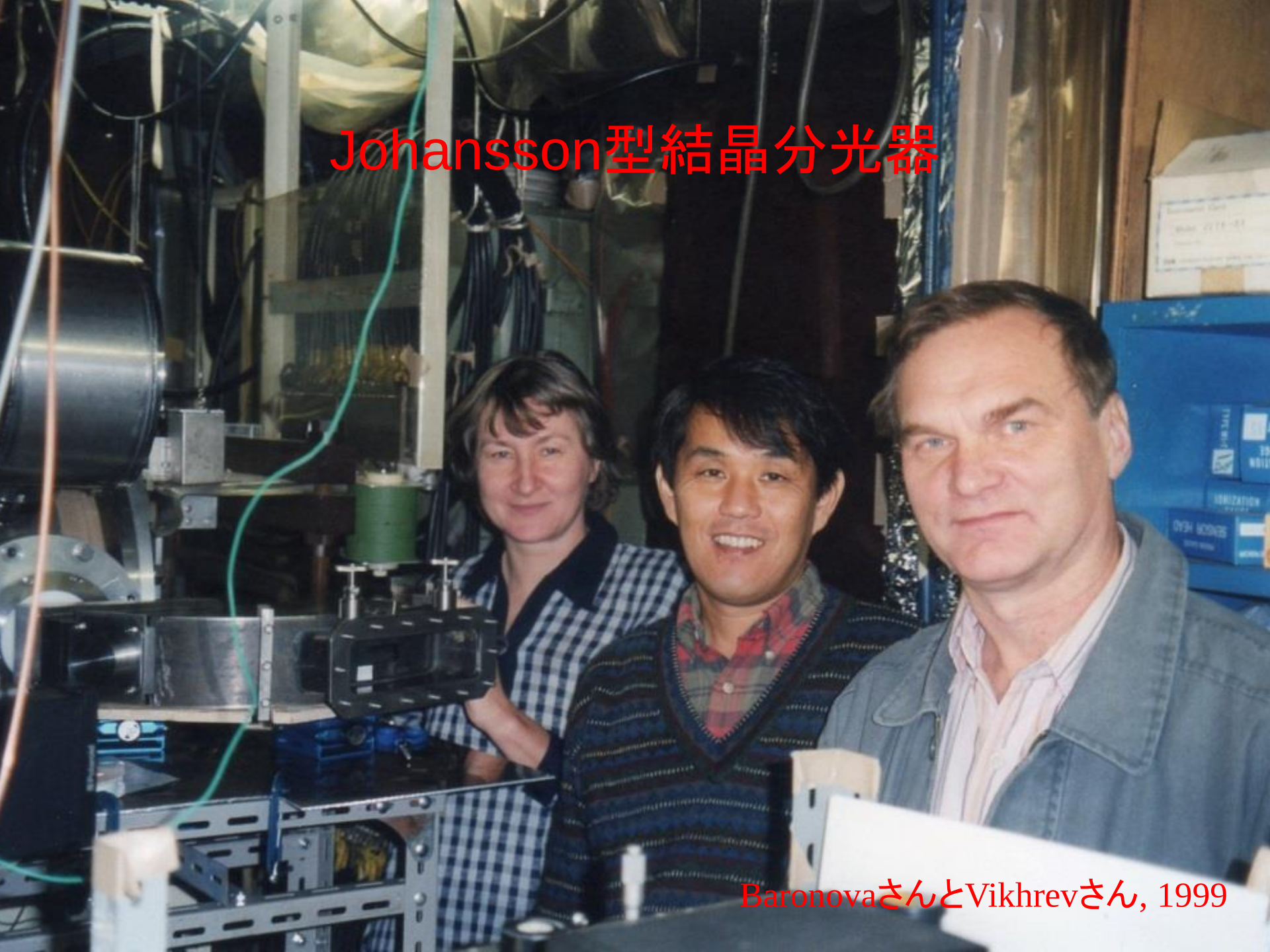


イメージインテンシファイアカメラ



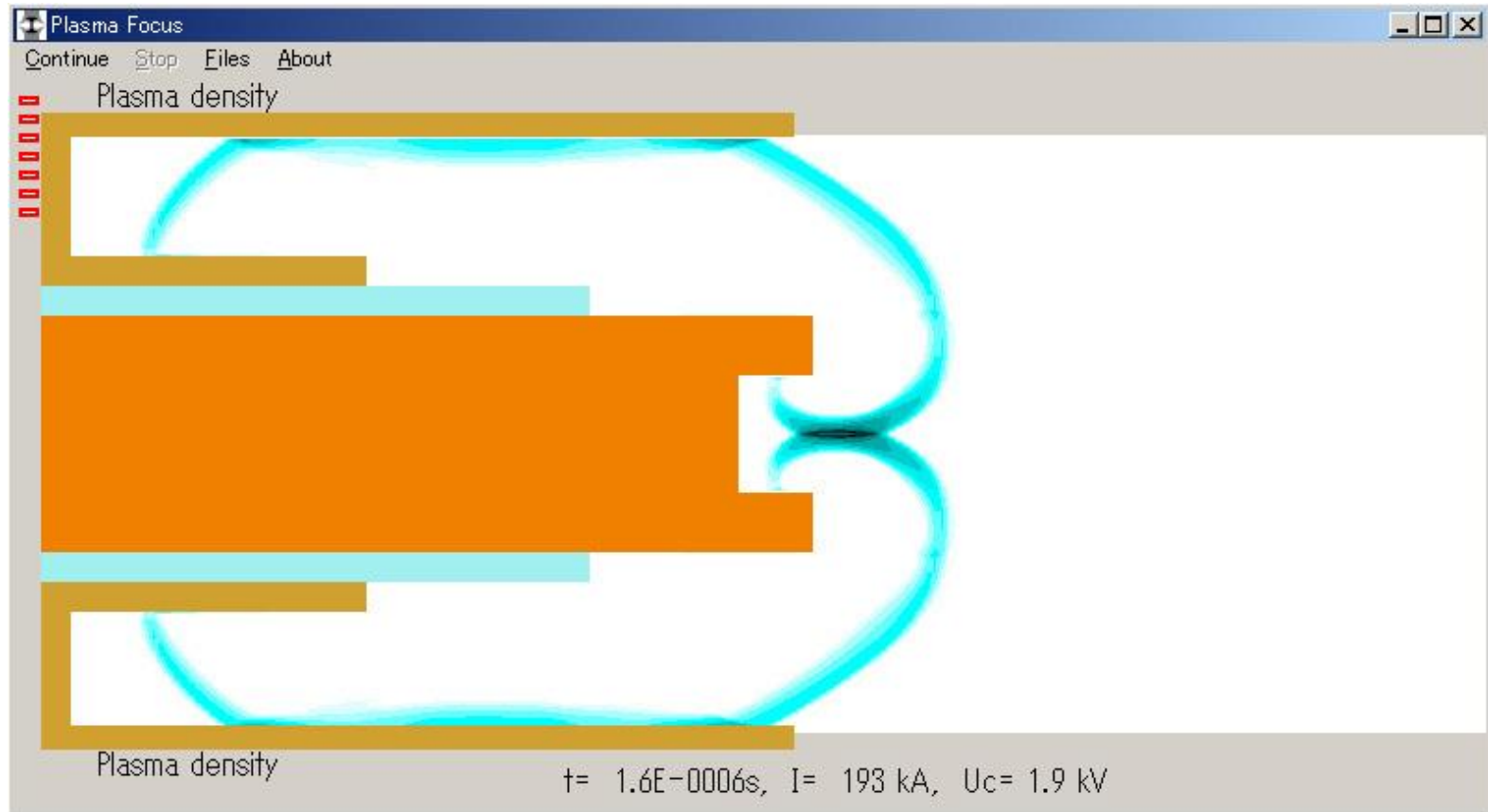
井草, 1998

Johansson型結晶分光器



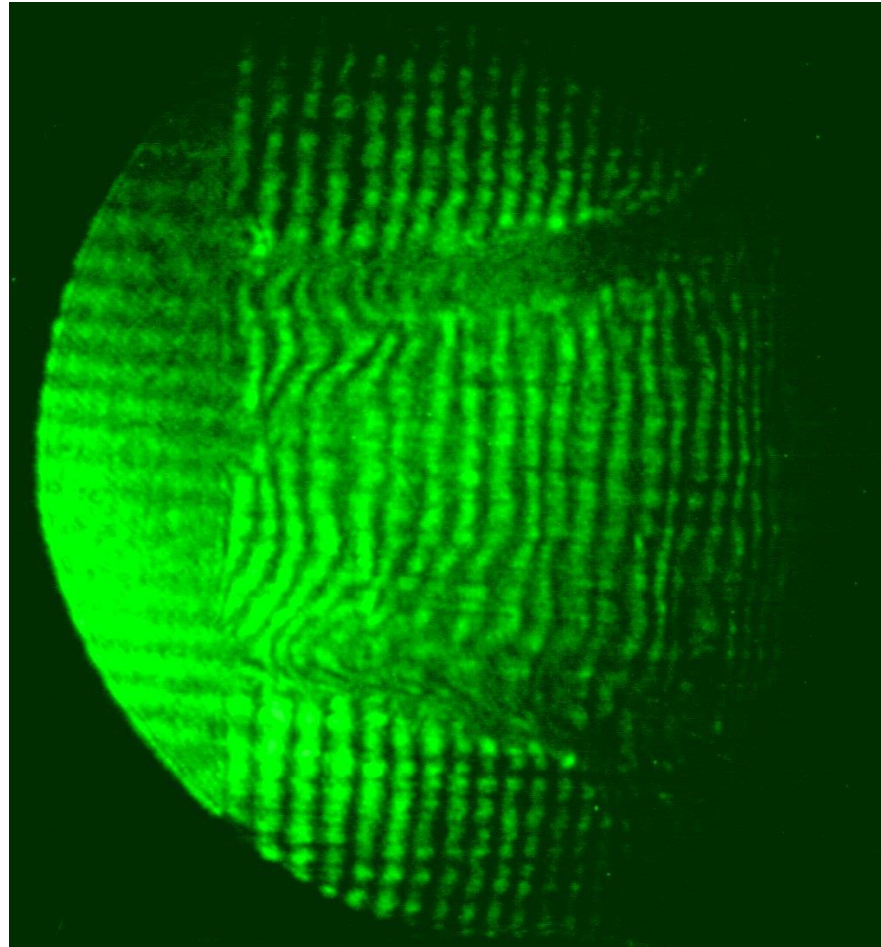
BaronovaさんとVikhrevさん, 1999

プラズマフォーカス



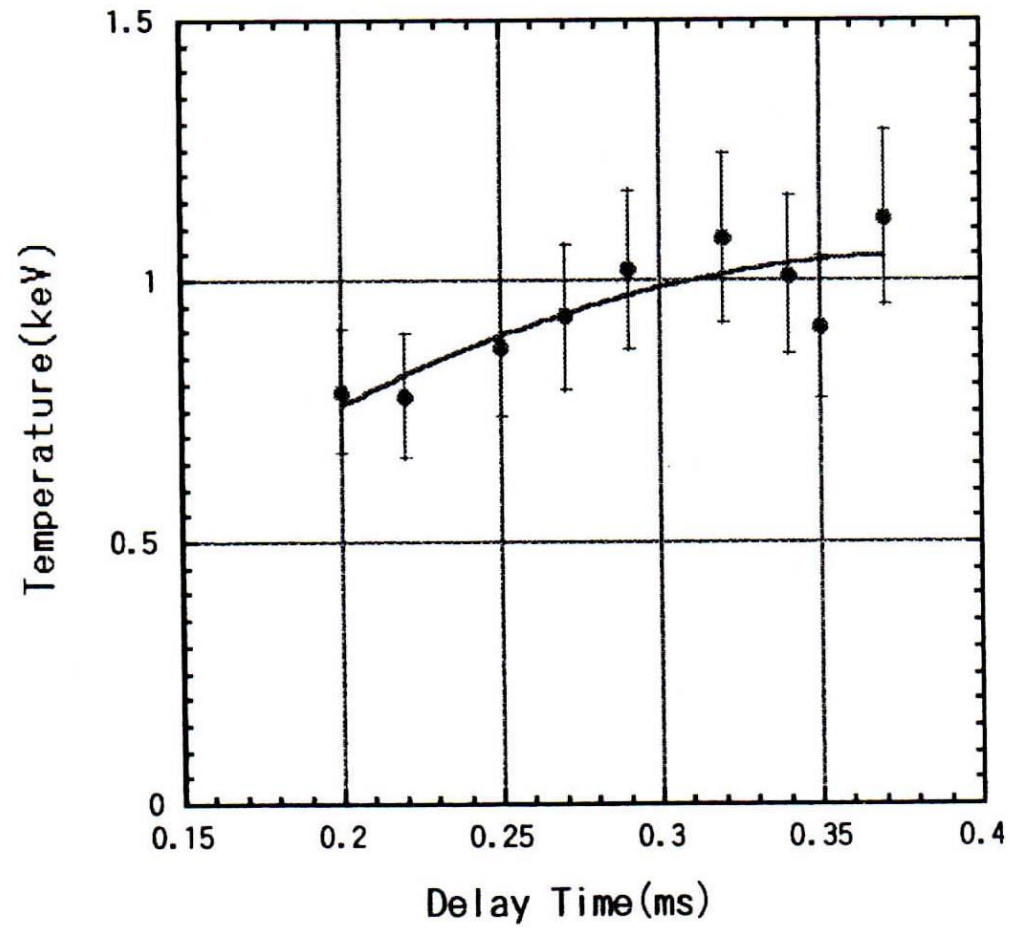
MHD Code by Viktor Vikhrev, 1999

レーザー干渉測定

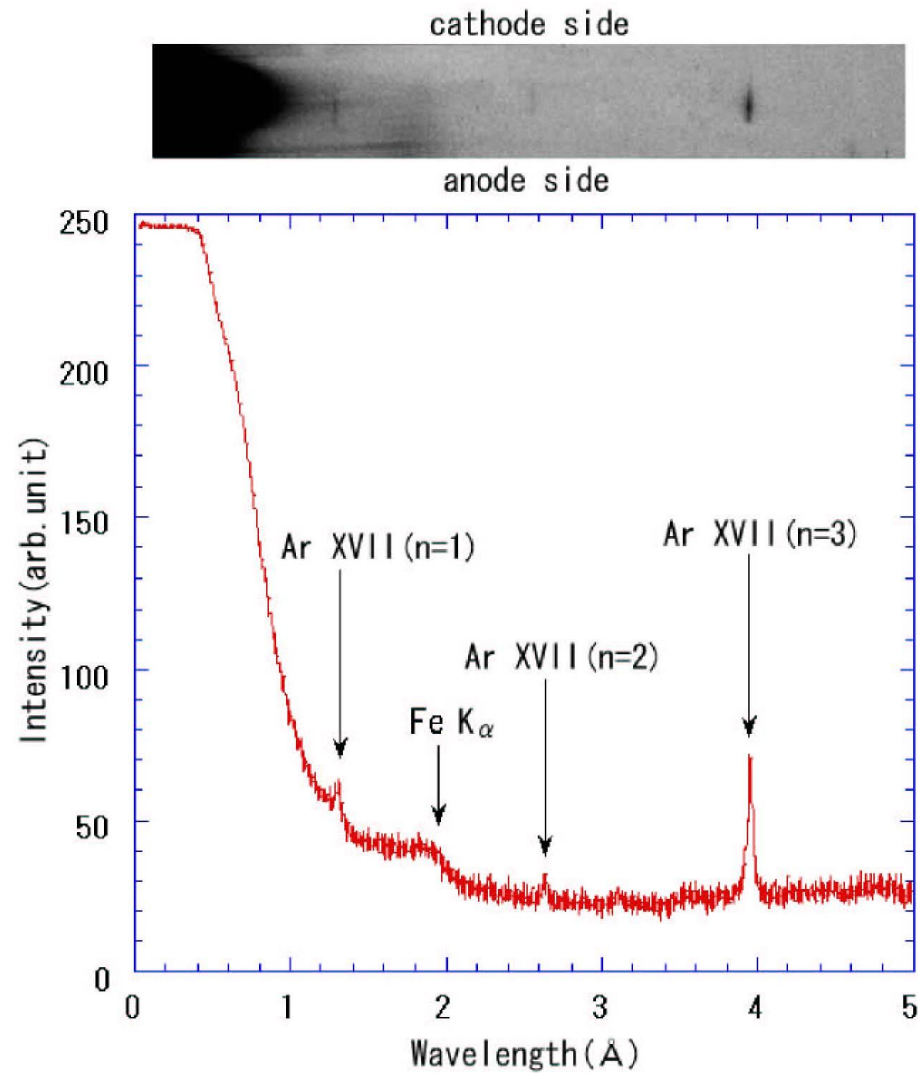


武藤, 2000

結晶分光測定



結晶分光測定

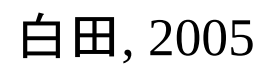


成澤, 2002

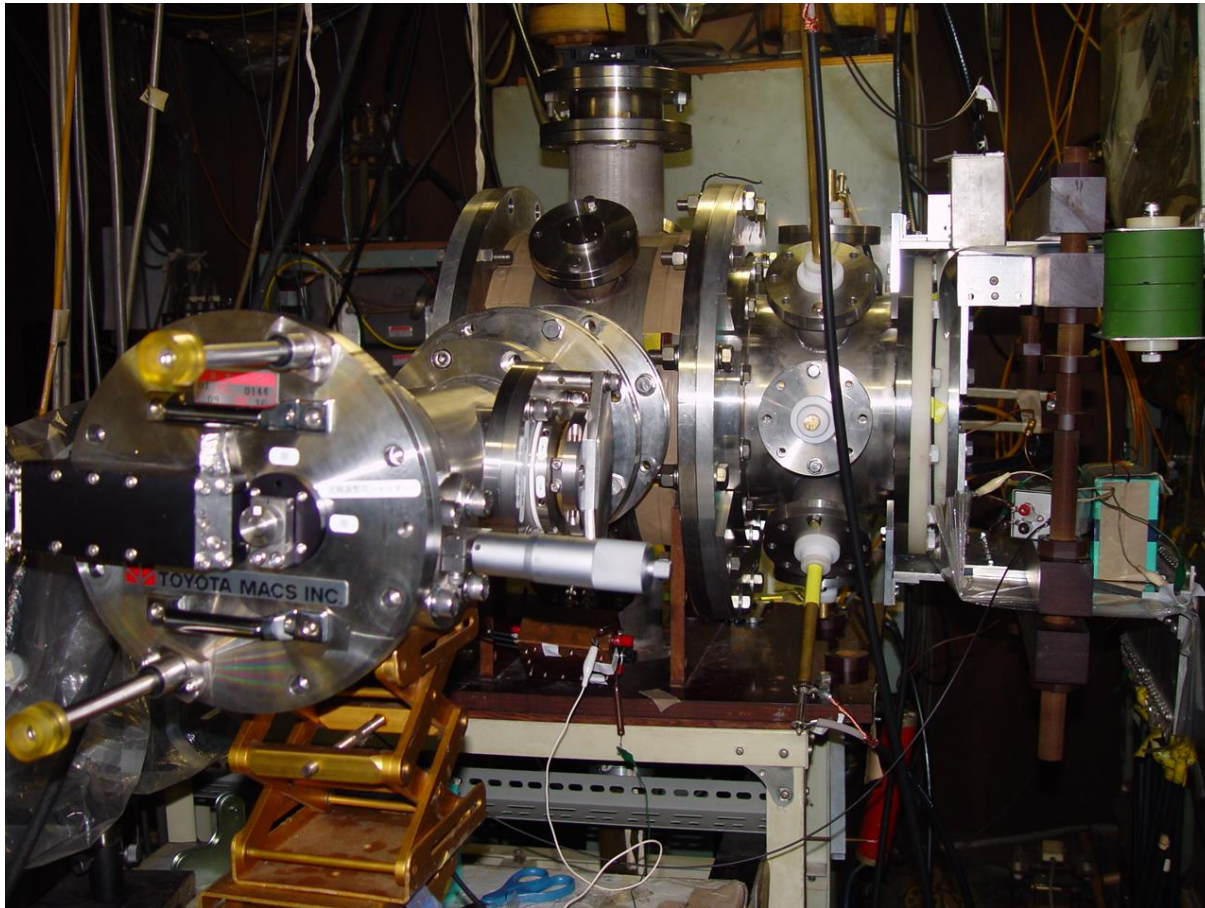
Plasma Opening Switch



千葉, 2003

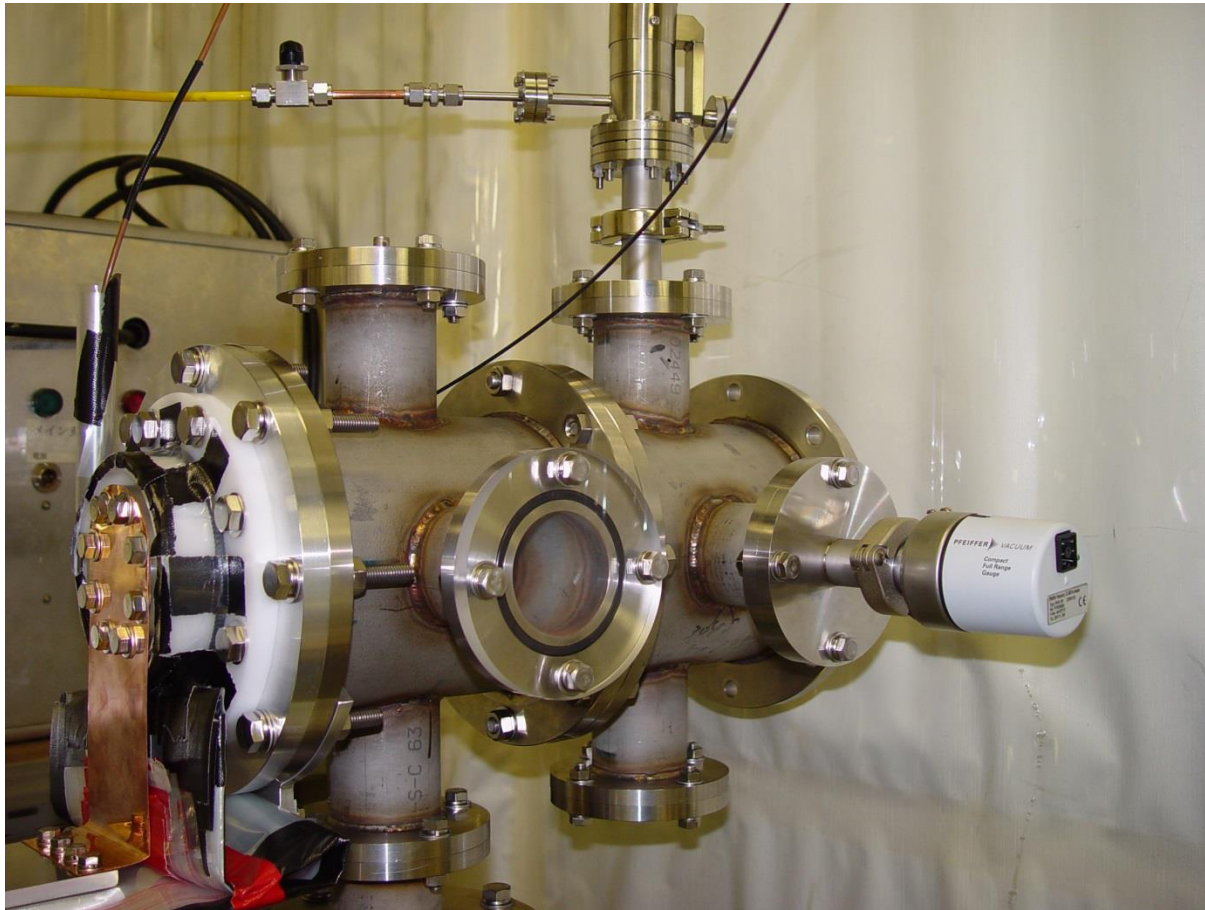


EUV 分光測定



小林, 2004

SHOTGUN II プラズマフォーカス



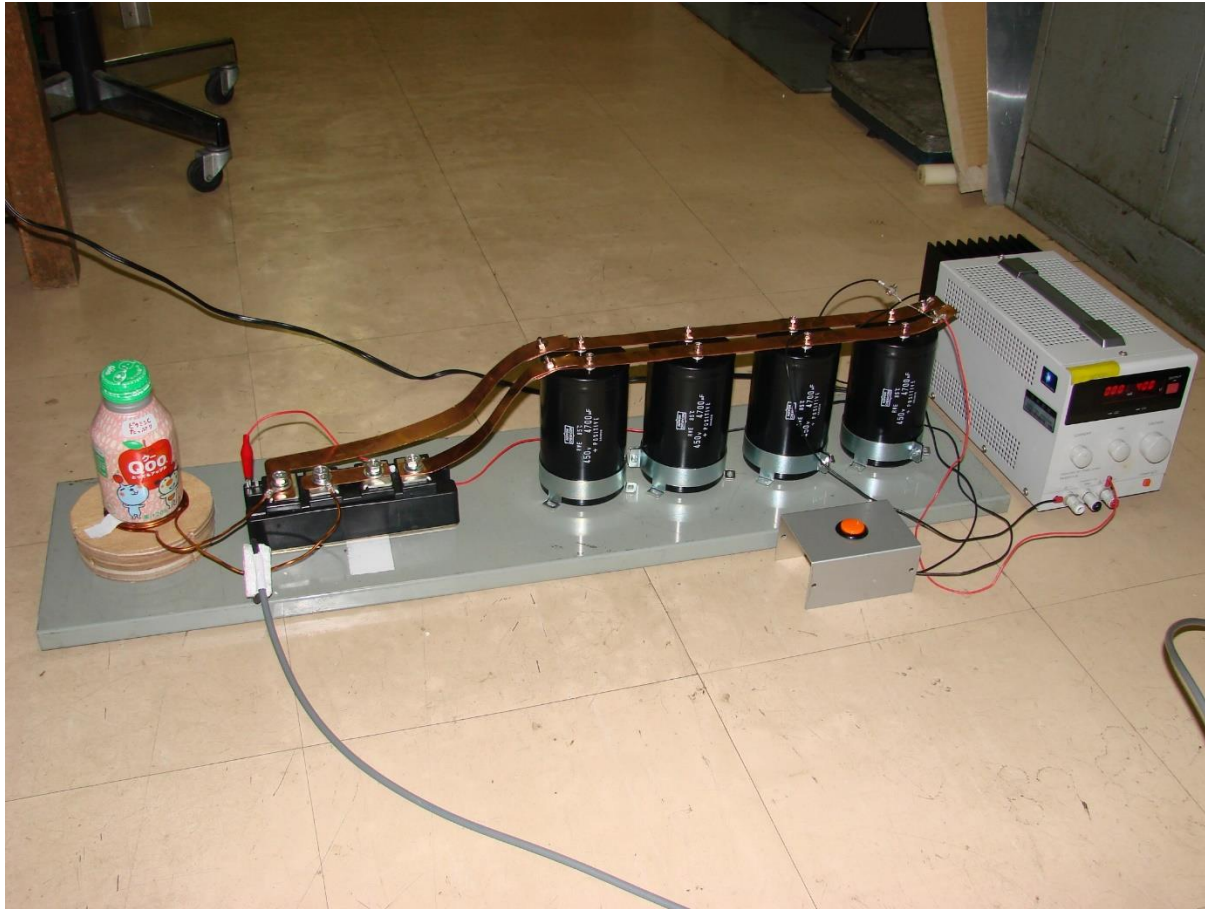
林, 2005

テスラコイル



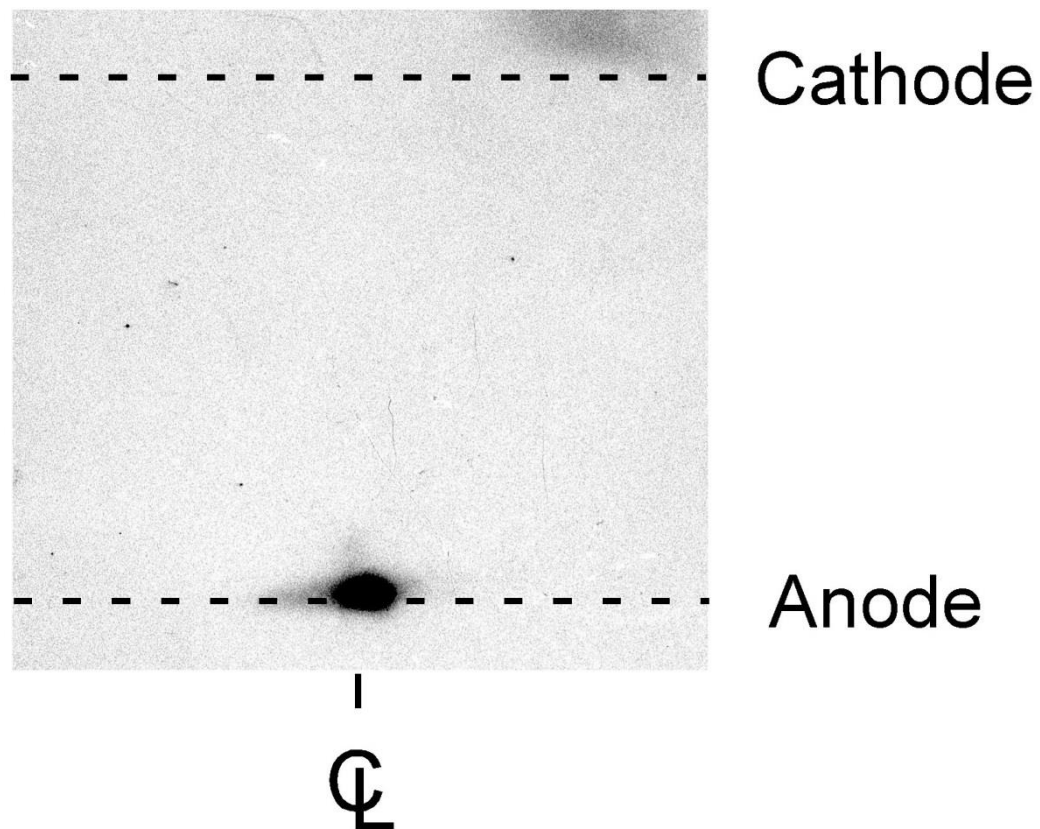
田中, 2004

電磁力とピンチ効果

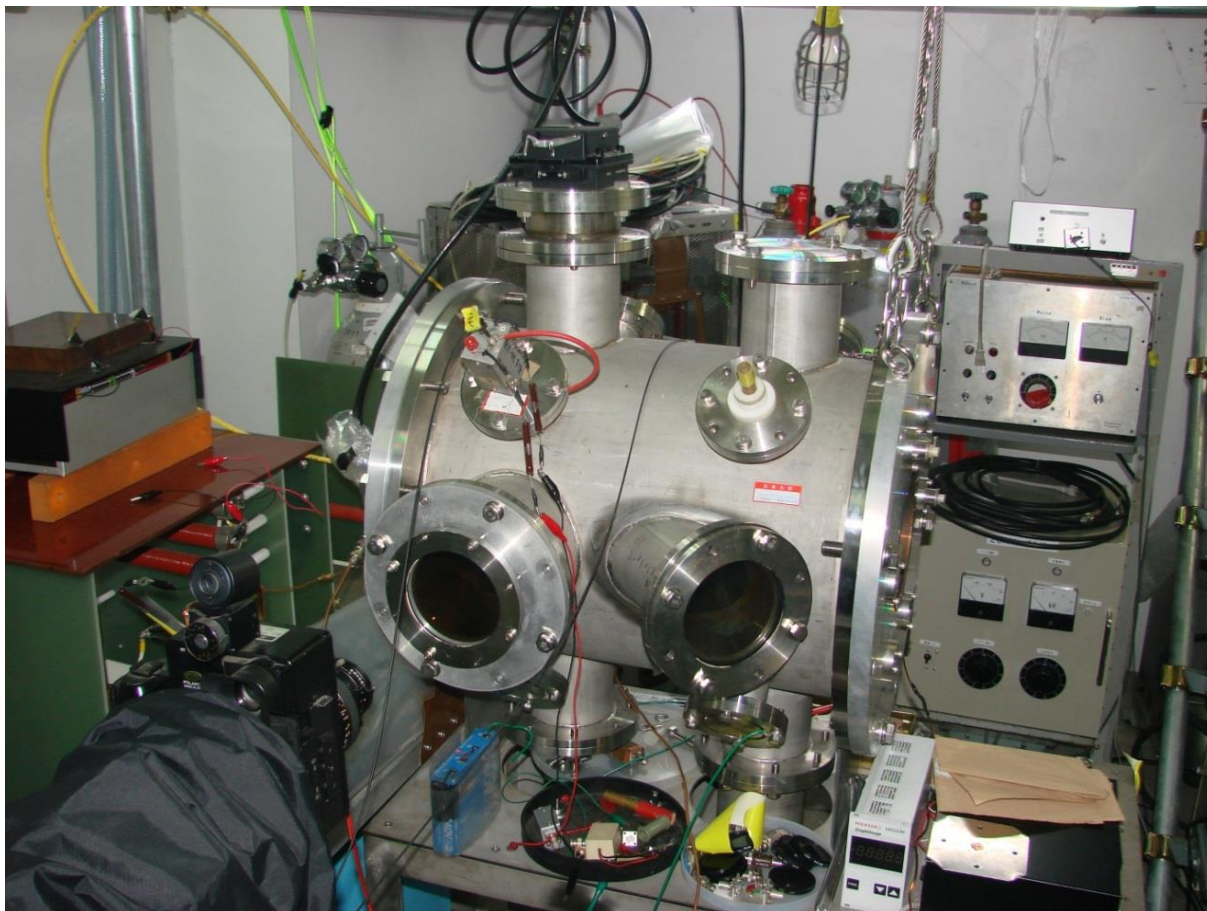


大木, 大島, 奥田, 加藤, 吉水, 2006

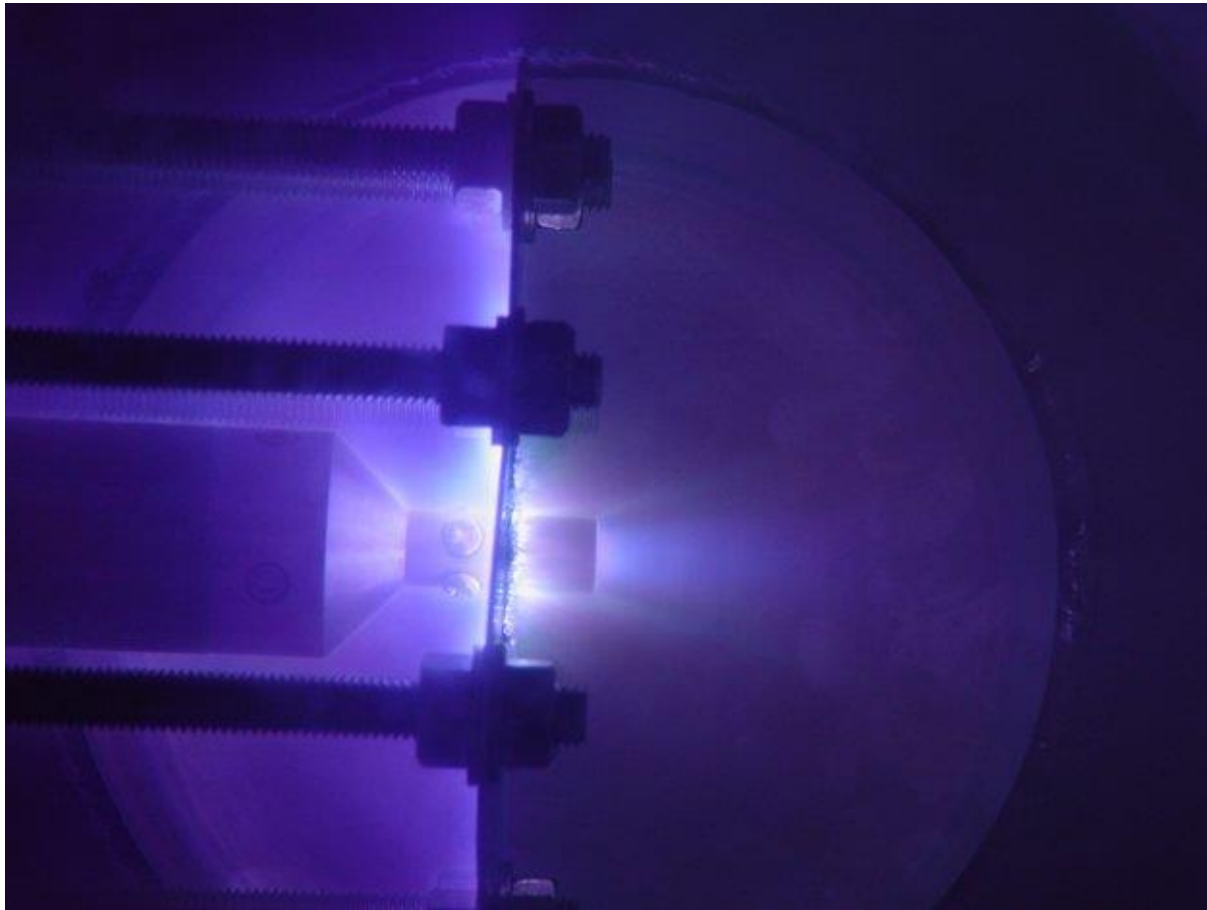
発散型ガスパフZピンチ



SHOTGUN III 装置

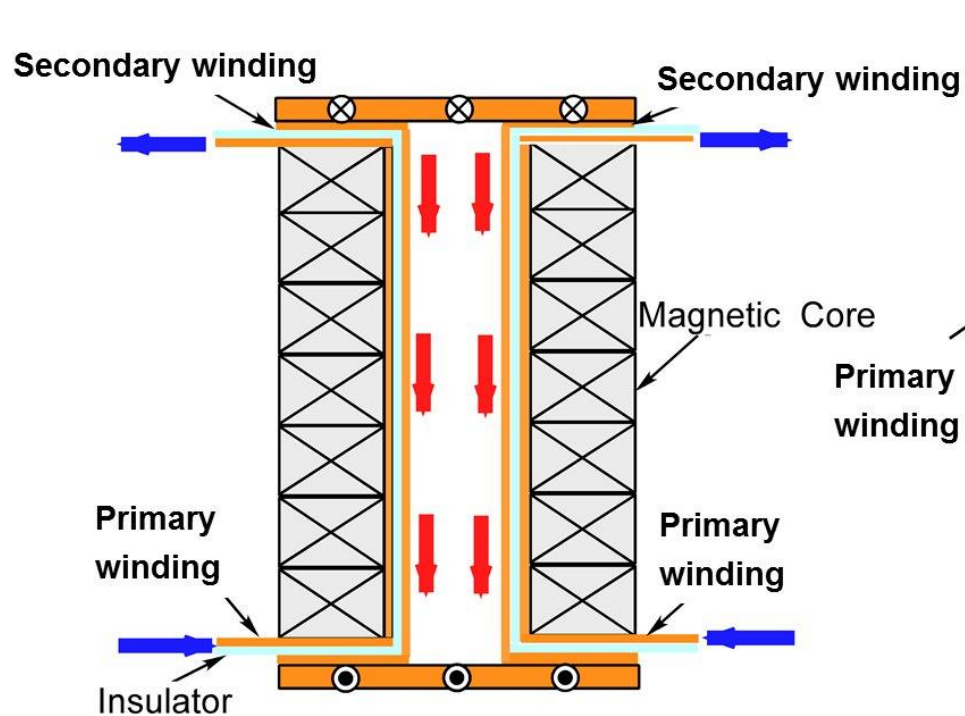


シートZピンチ

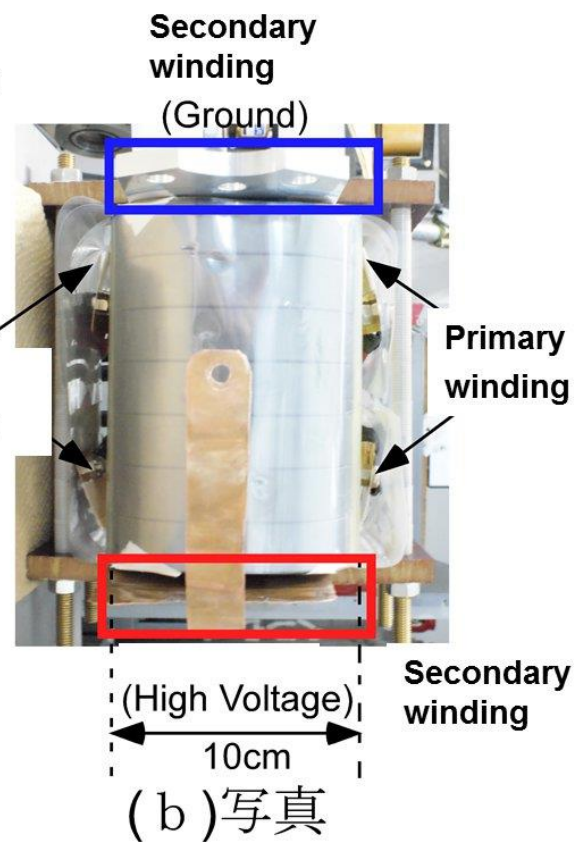


加藤, 2010

プラズマ入射装置



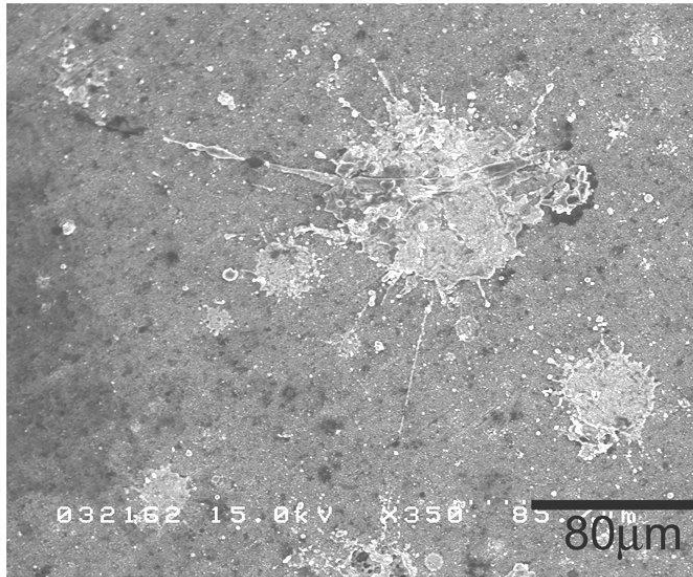
(a)概念図



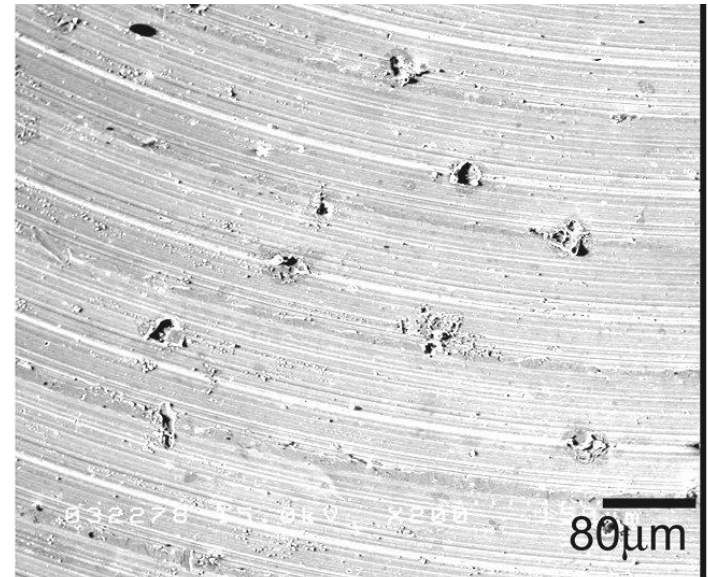
(b)写真



微粒子生成



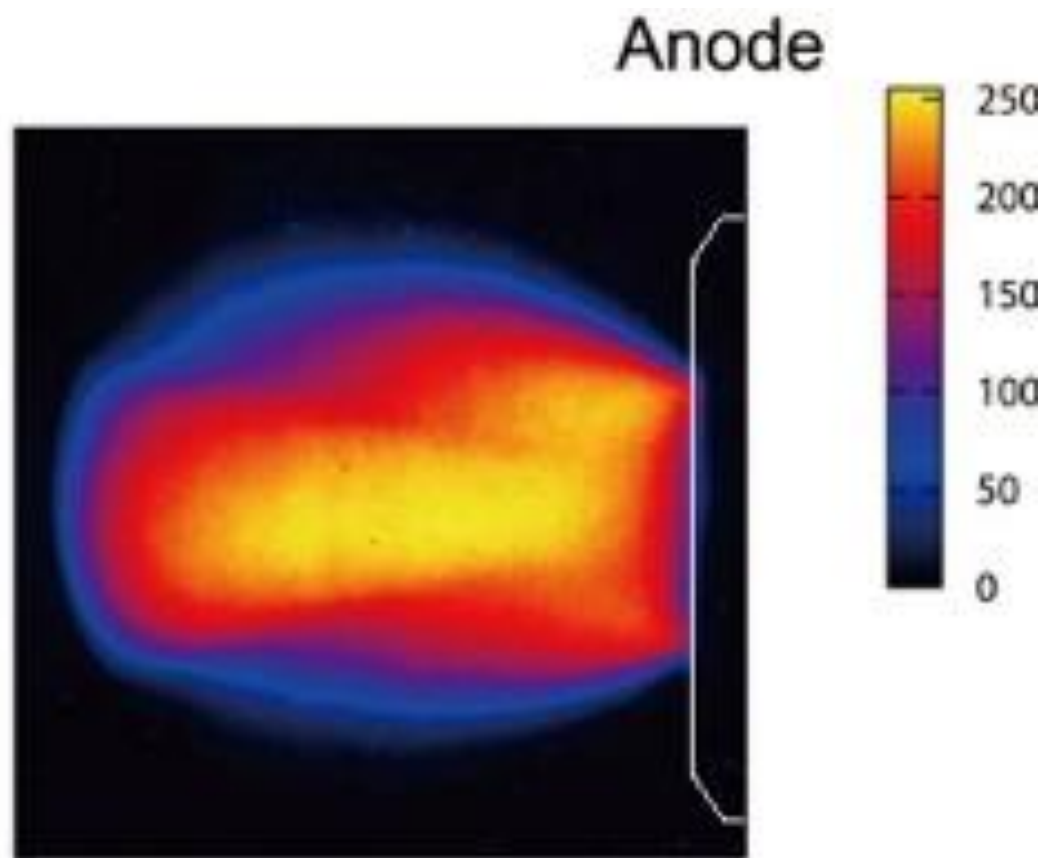
He 放電



Ar 放電



電子銃を用いたガス分布の可視化



Hole 3 mm, Throat 0.4 mm

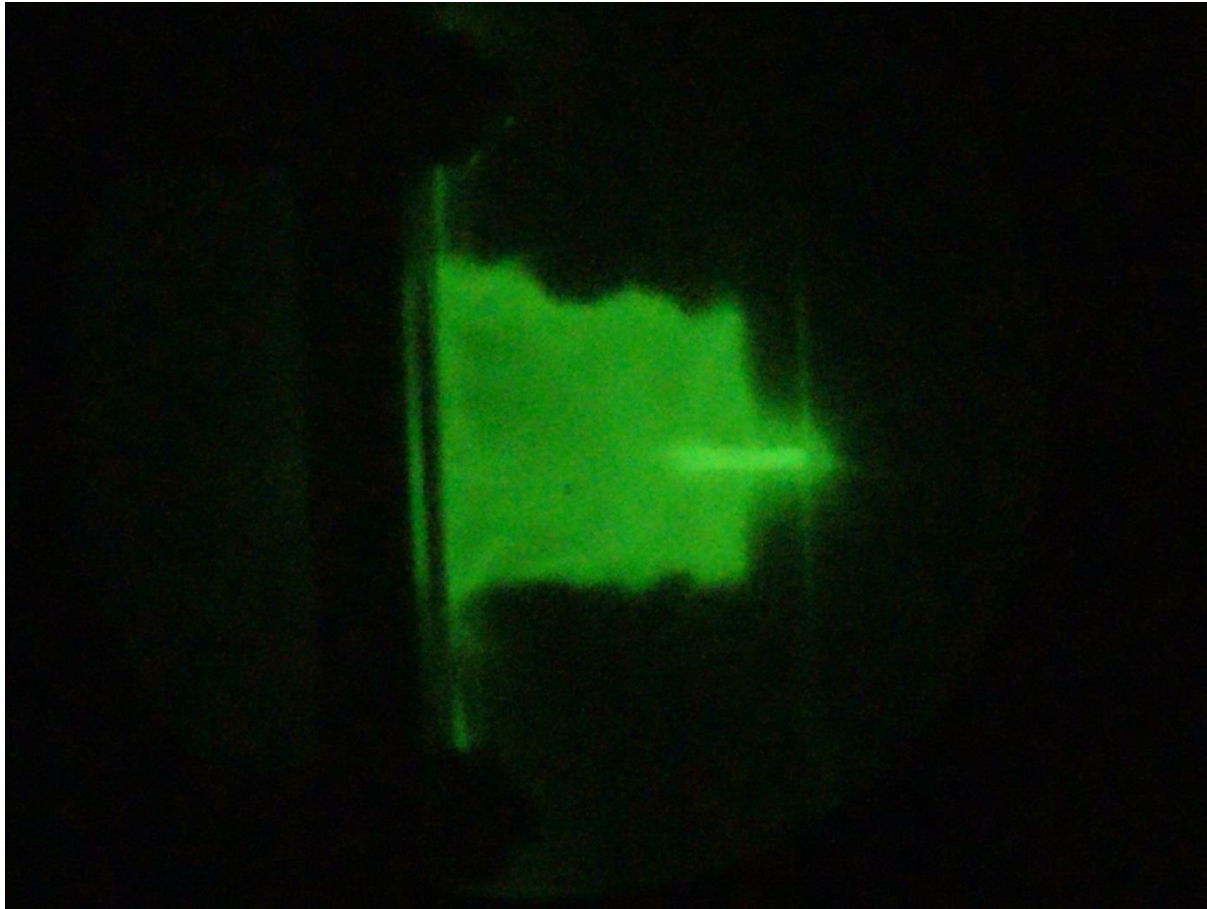


イオン加速



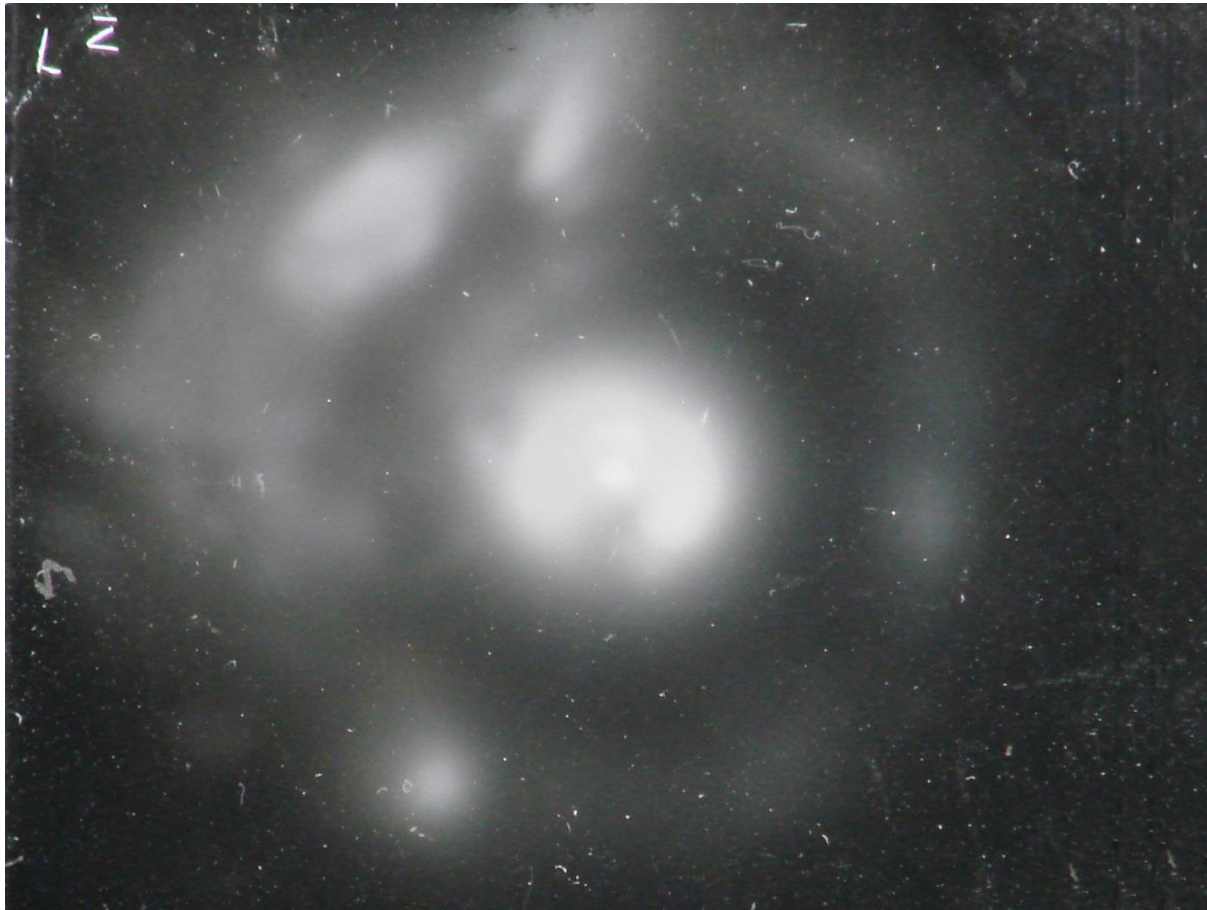
西尾, 佐久間, 2011

ジェットの生成



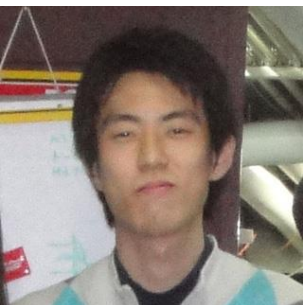
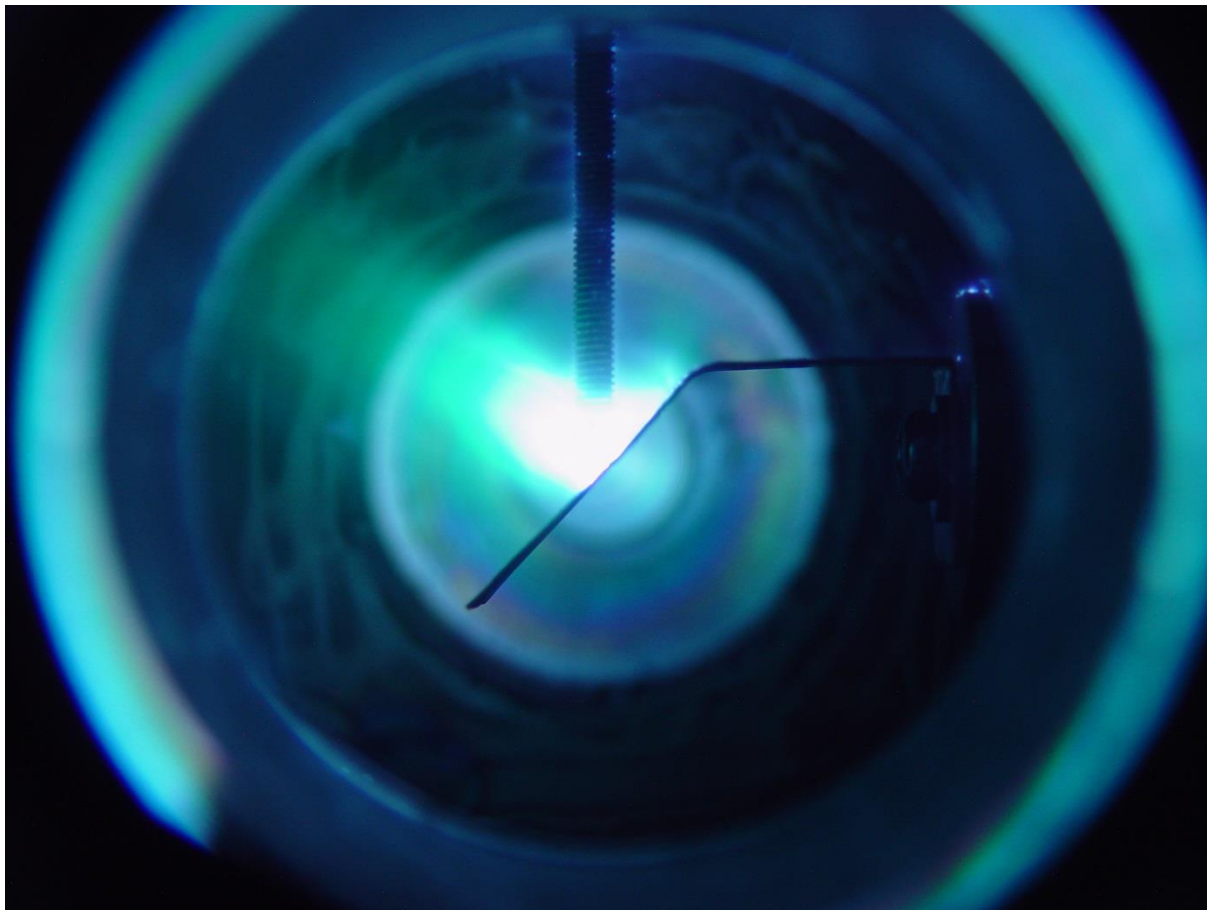
山埜井, 2012

イオンカメラ

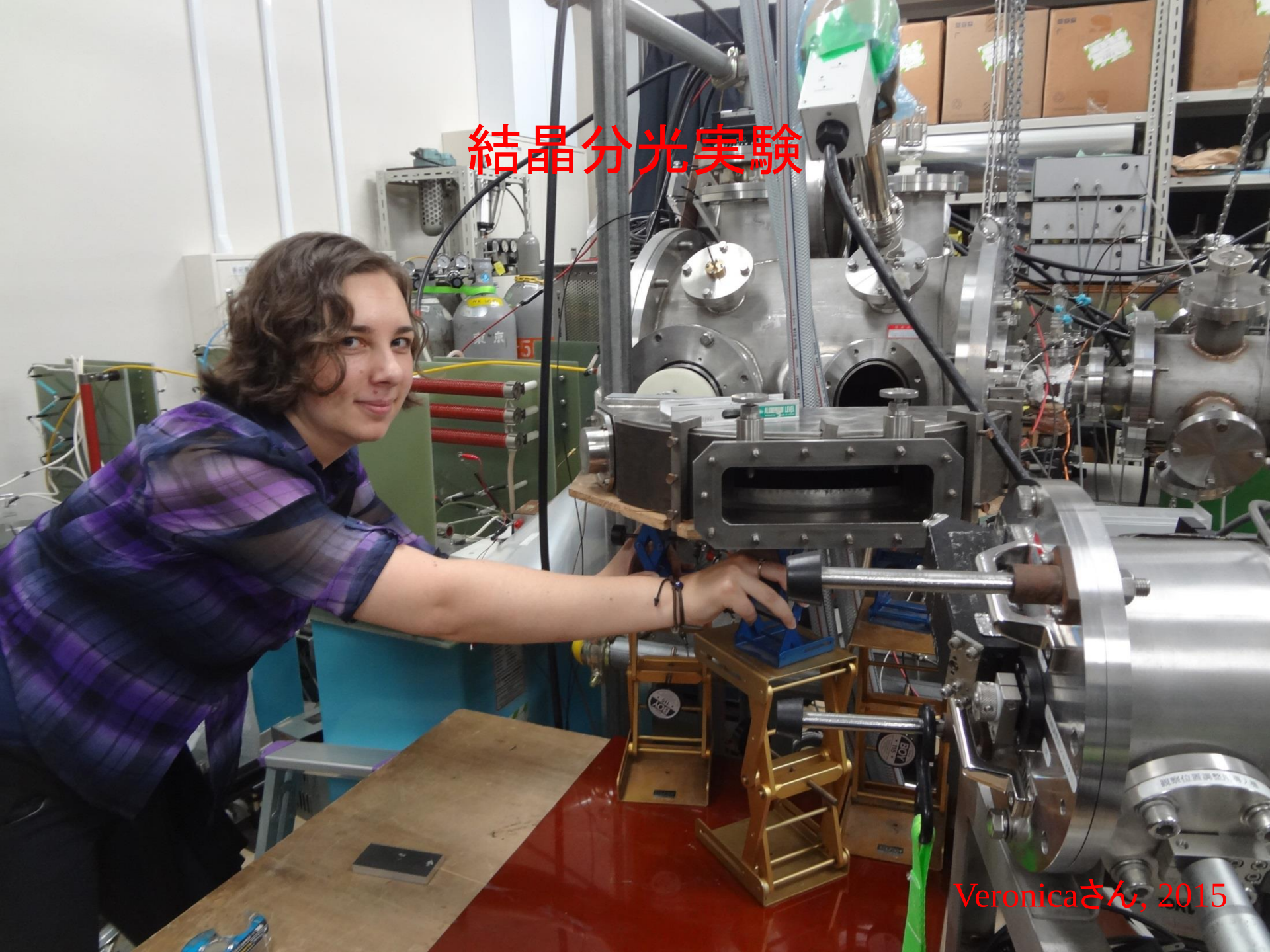


岩田, 2013

X線バックライター

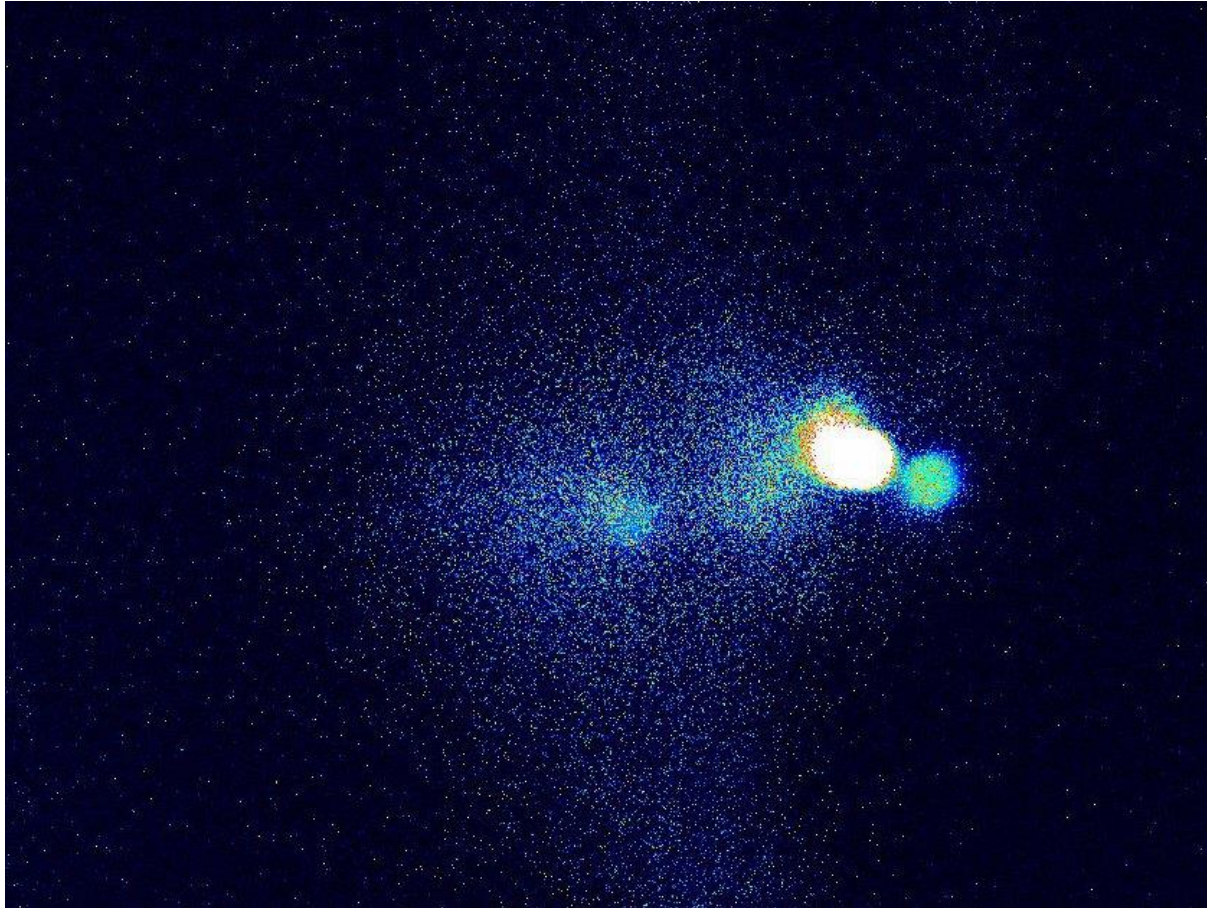


結晶分光実験

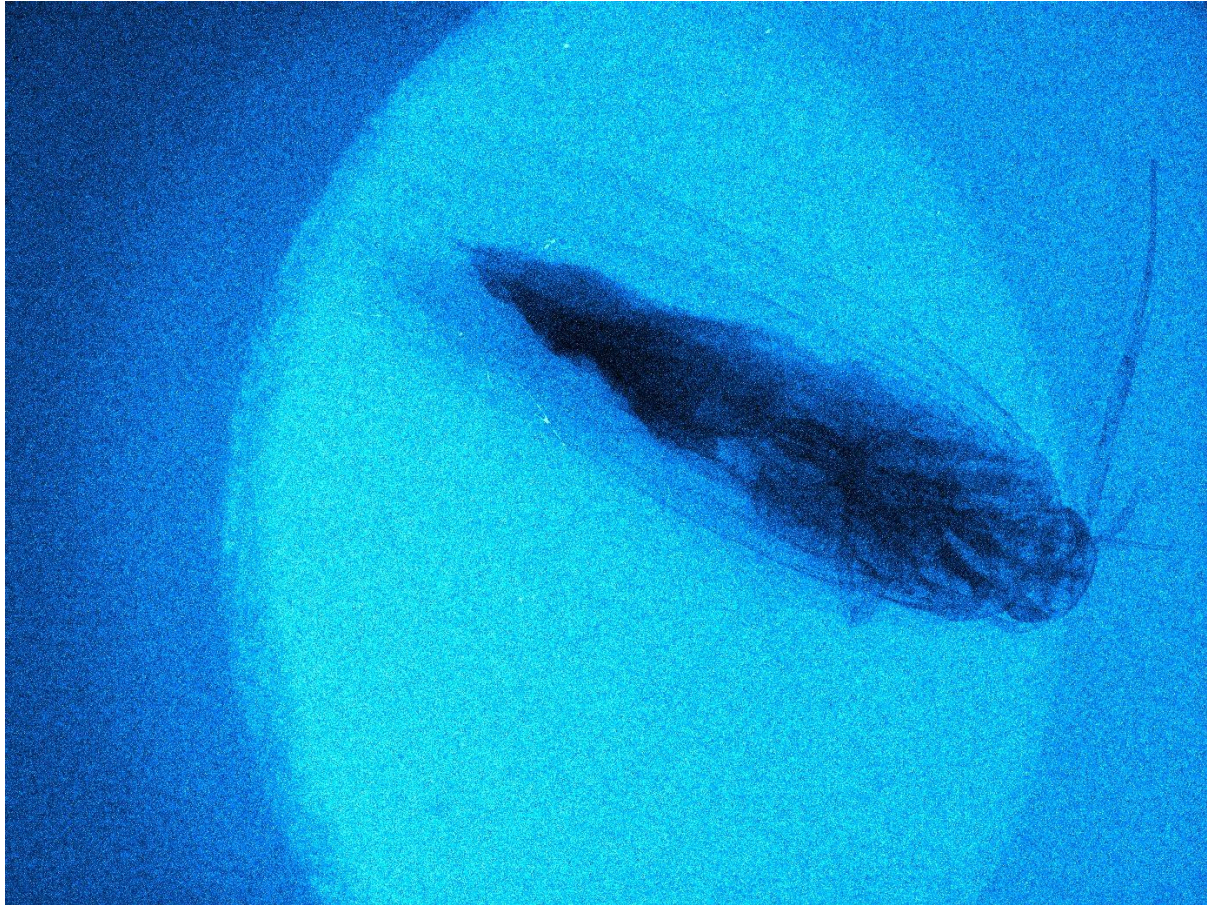


Veronicaさん, 2015

CCD観測

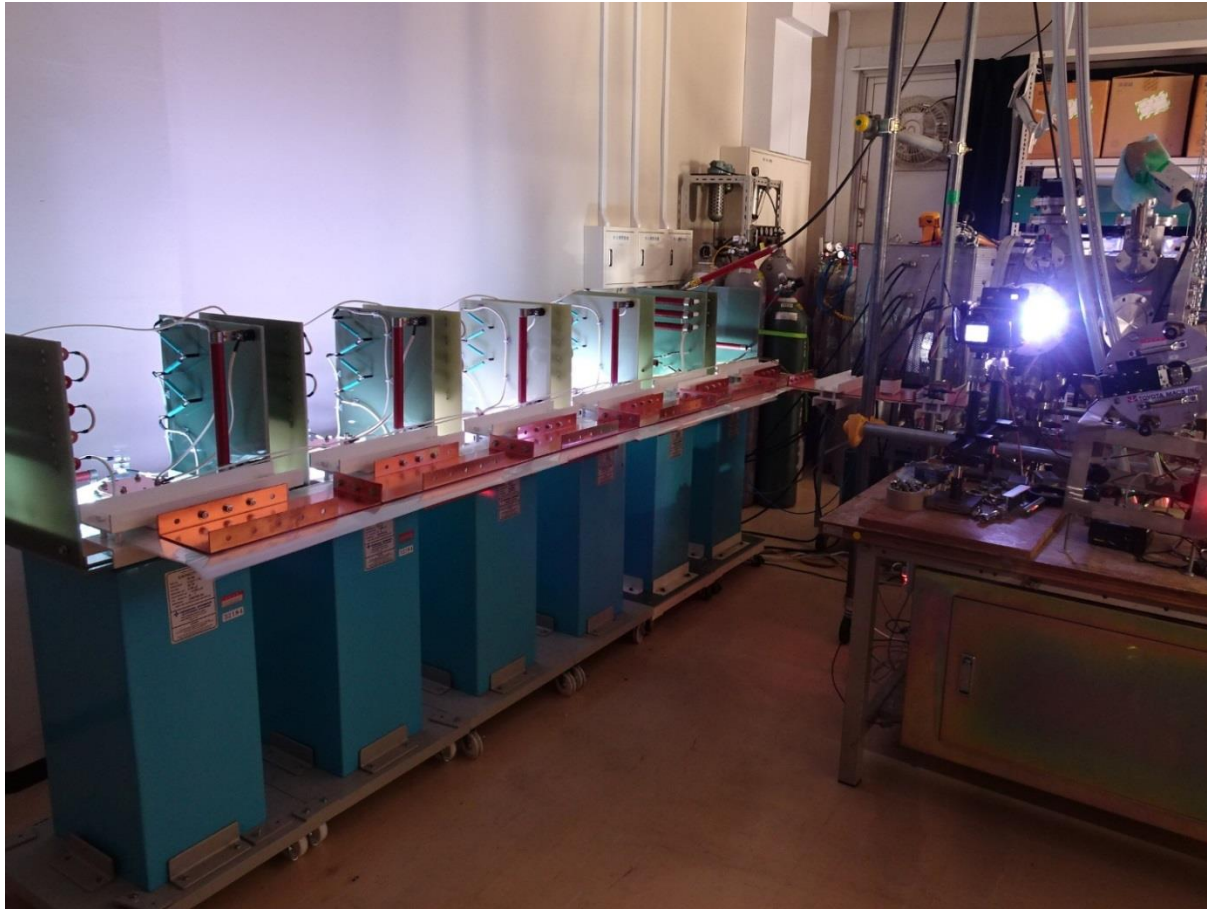


微小生物観測

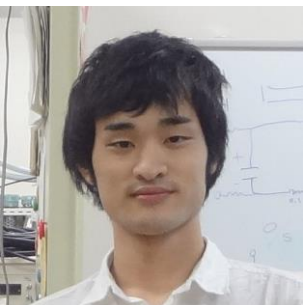
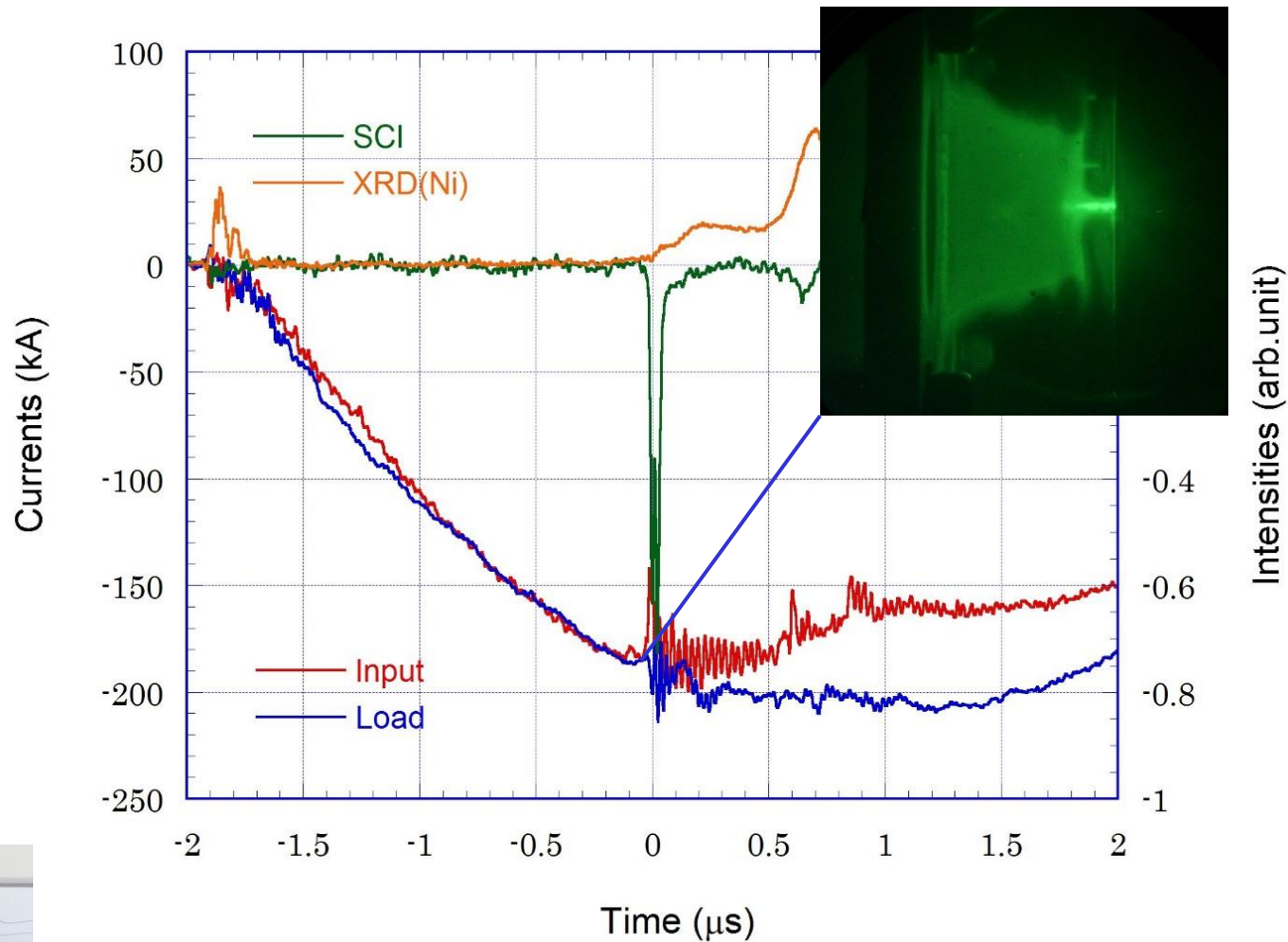


袴塚, 2016

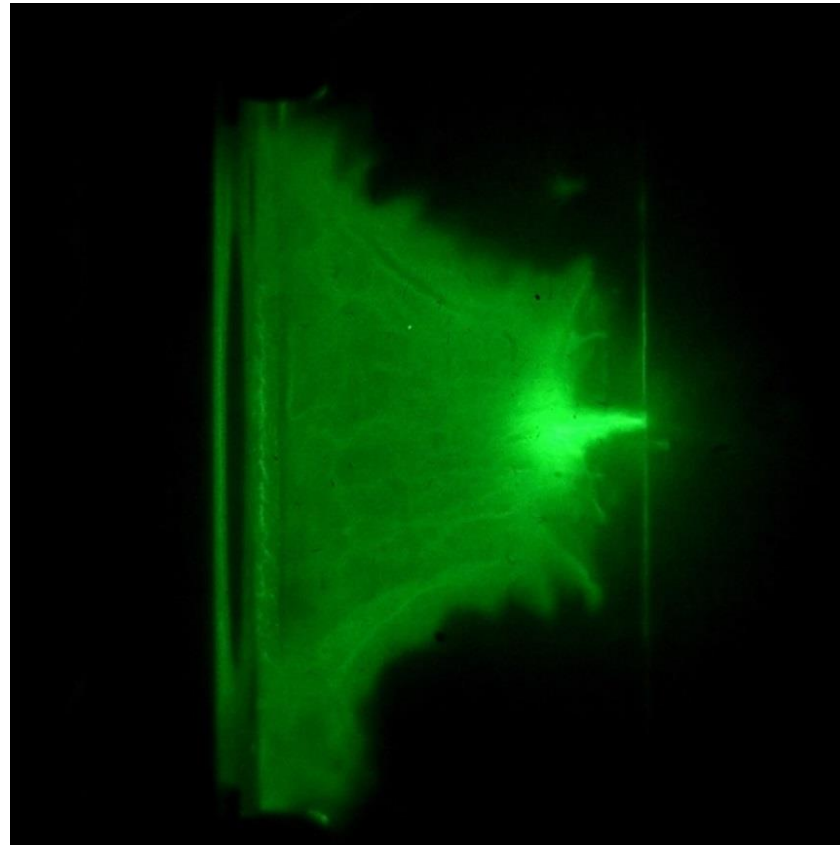
SHOTGUN III Upgrade



発散型Zピンチプラズマの収縮過程



C_3H_8 Zピンチ



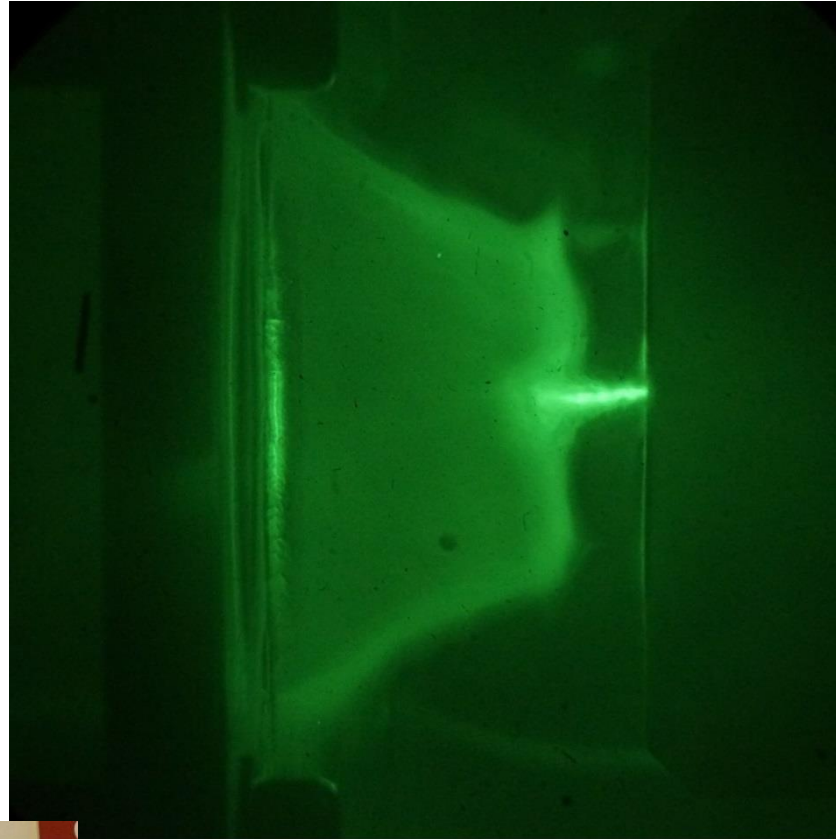
|
Outer

|
Inner



砂金, 2018

Ar + H₂ 混合ガスZピンチ



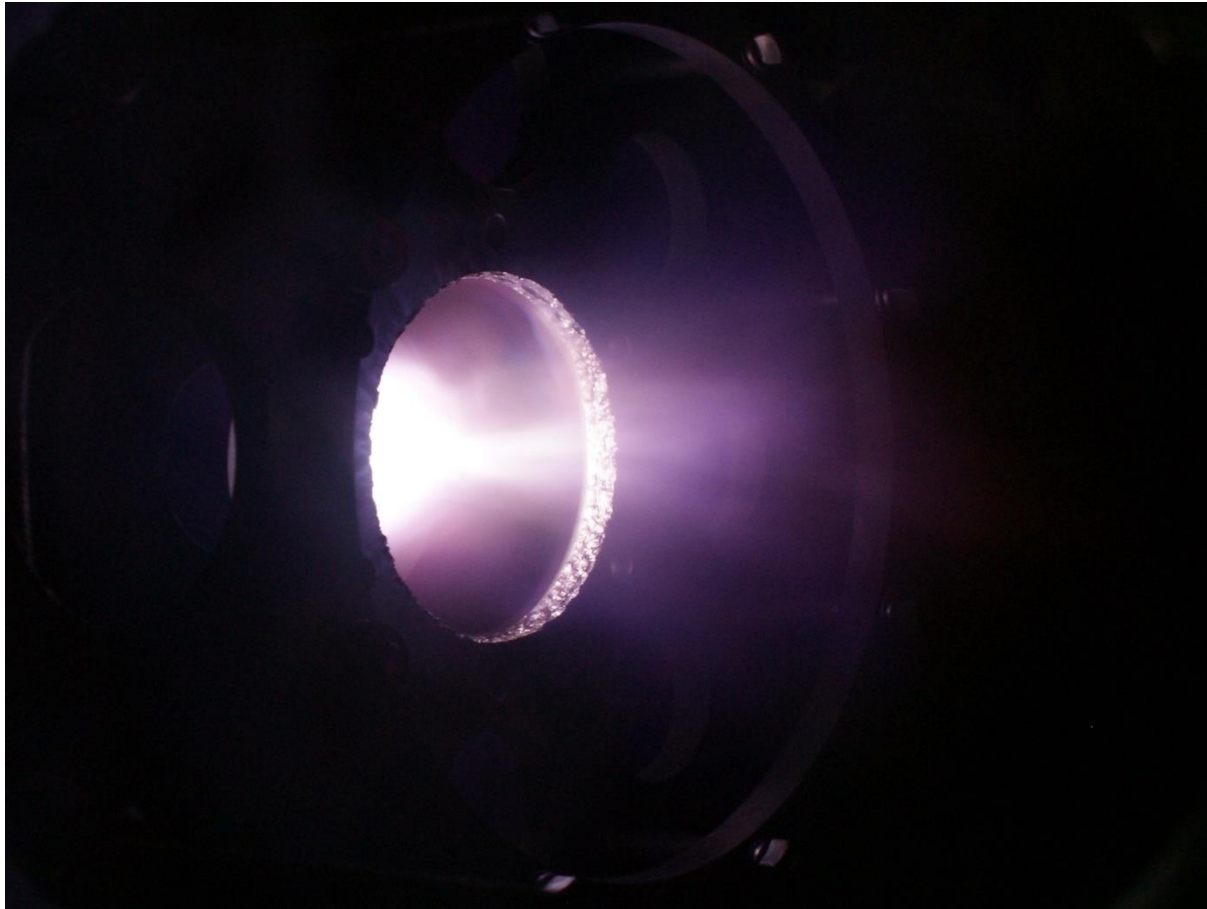
|
Outer

|
Inner

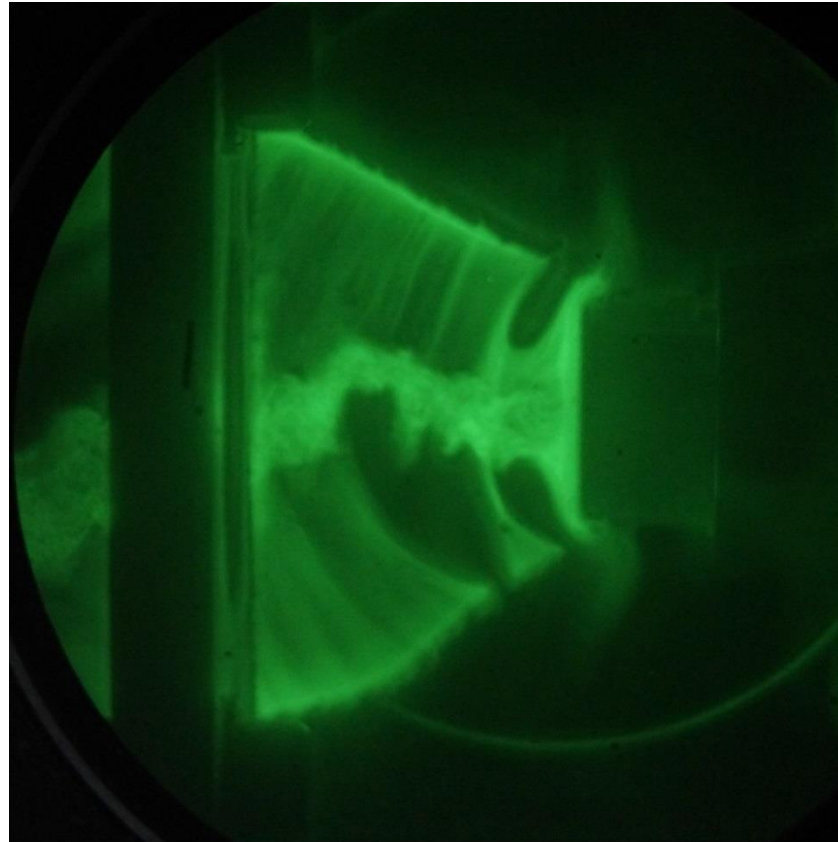


井野, 加藤, 2019

Ar + H₂ 混合ガスZピンチ



金属ワイヤZピンチ



|
Outer

|
Inner



高尾, 2020

ラストショット



2020年3月24日

近況



GoTo黒部 2020年10月7日