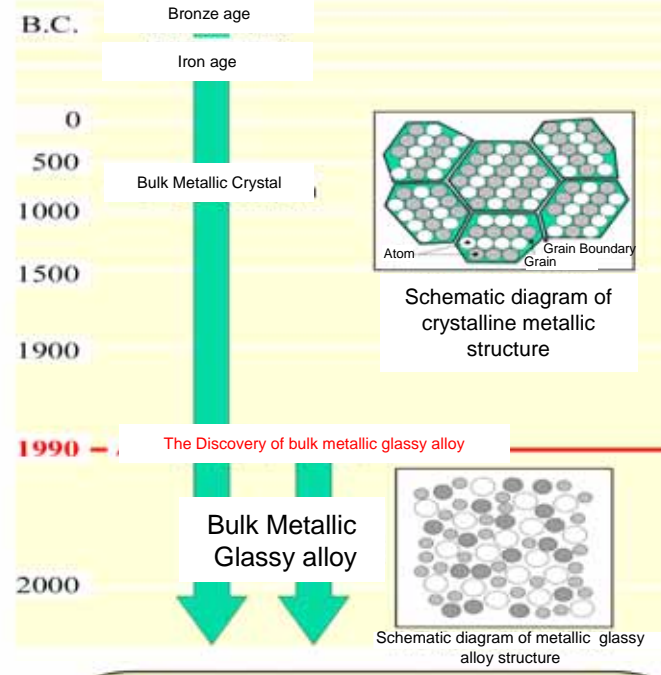


Metallic Glass

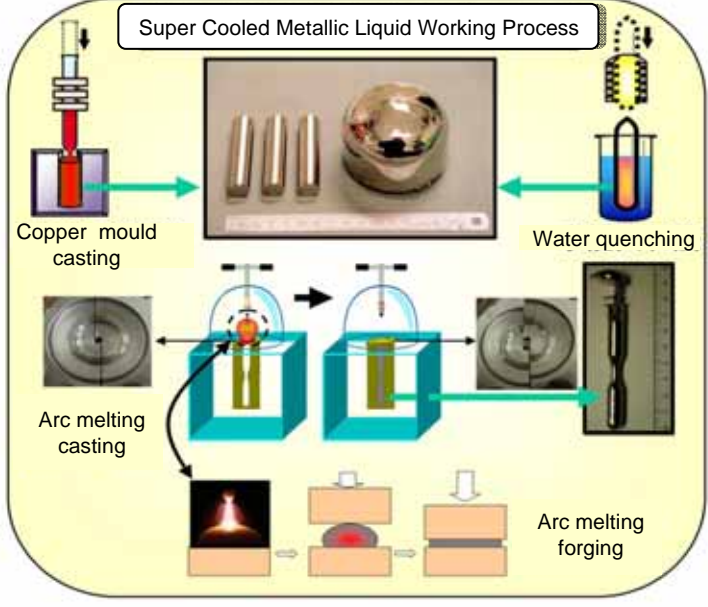
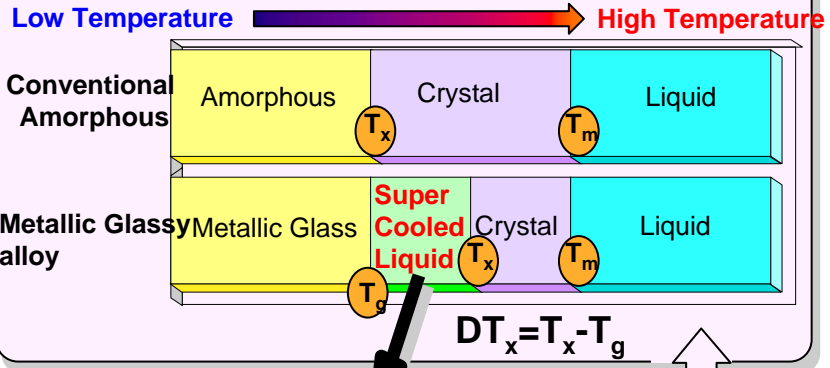
Prof. A. INOUE
(Tohoku Univ.)

History of bulk metallic materials

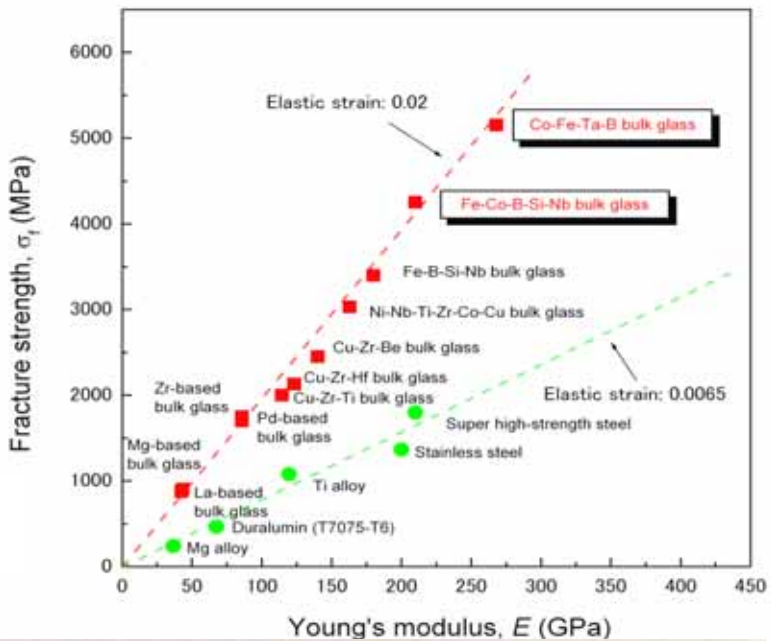


The Characteristics of Metallic Glass

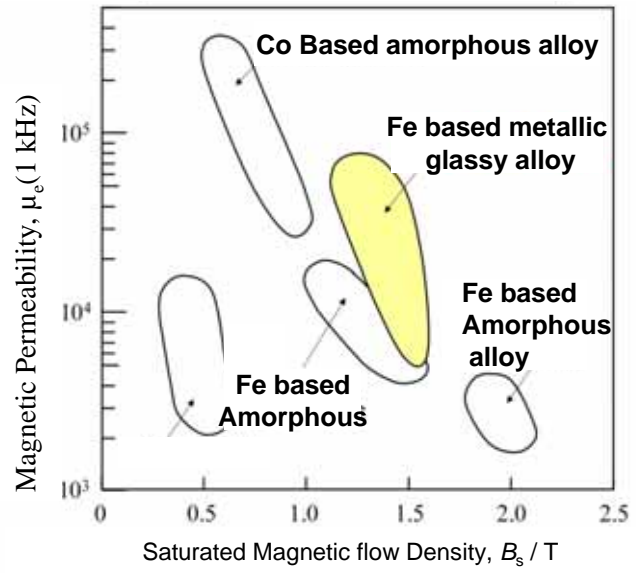
Comparing the phase change of metallic glassy alloy V.S. conventional amorphous alloy heated by 1 K/s of heating rate



Excellent Mechanical Properties of Metallic Glassy Alloy (High Strength, Low young's modulus)



Excellent soft magnetism of Fe based metallic glassy alloy

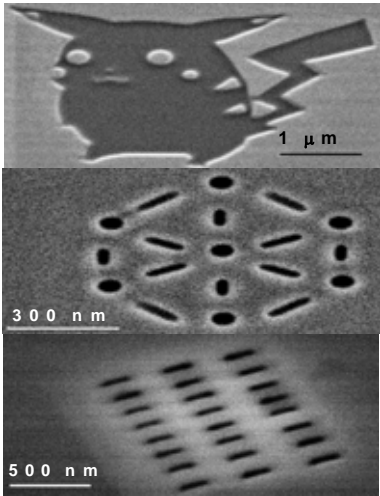


$Zr_{65}Al_{7.5}Ni_{10}Cu_{17.5}$ metallic glassy alloy forging in the super cooled liquid state forged at a time for optical Instrument part.

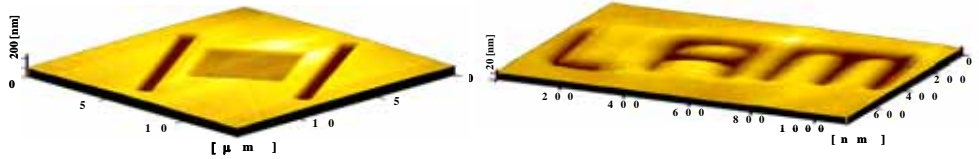
Patent License Available
Contact : Y. Ohara (JST); license@jst.go.jp

Ultra Fine Processing and application of Metallic Glassy alloy

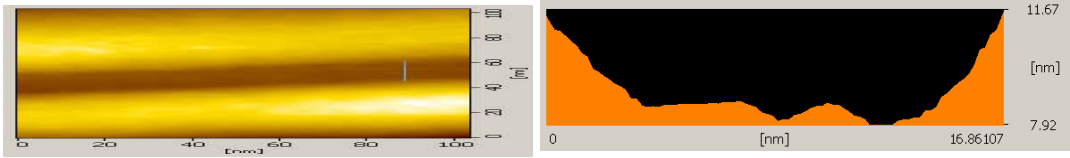
Ultra fine process of Metallic glassy alloy



Ultra fine shape of Pt deposited film on the processed Pt based metallic glass



17 nm groove made by FIB process from metallic glassy alloy plate

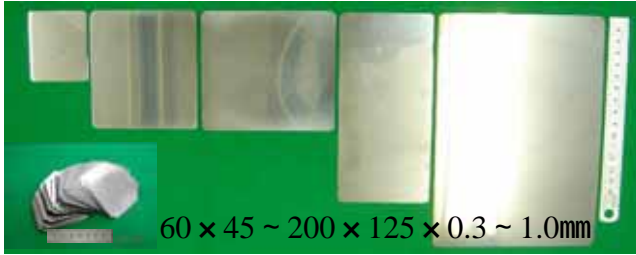


Ultra fine LAM image of metallic glassy alloy after processed by FIB

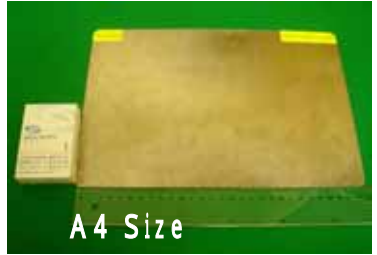
Metallic Glassy Ingot Plate



Ingot of controlled compositional core

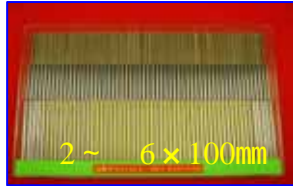


Each size of plate for mass production



A4 Size metallic glassy alloy plate for fuel cell

Metallic Glass Rod and Powder

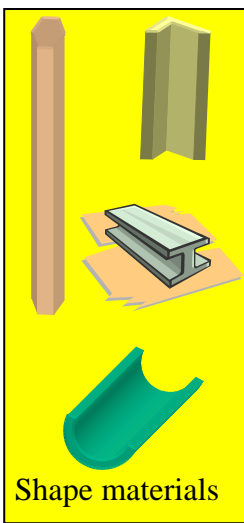


Each size of metallic glassy rod

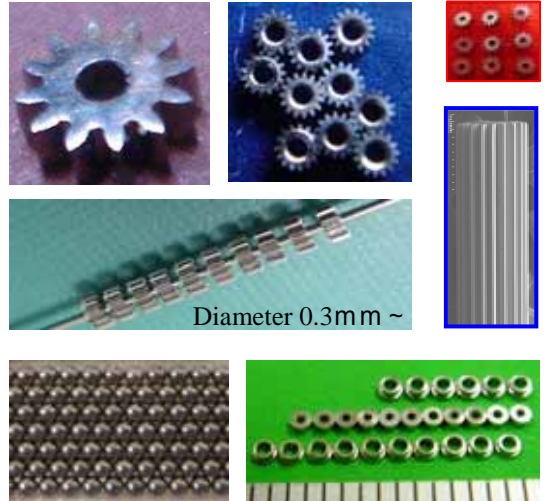


Metallic glass powder of each composition

Metallic glass pipe and shape materials



Metallic glass gear, spring and ball



Diameter 0.3mm ~

Metallic glass casing and fine surface after viscose flow process

