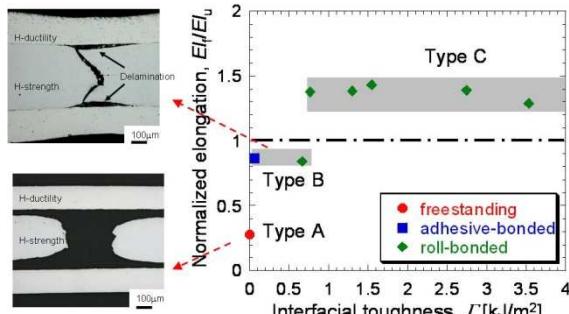


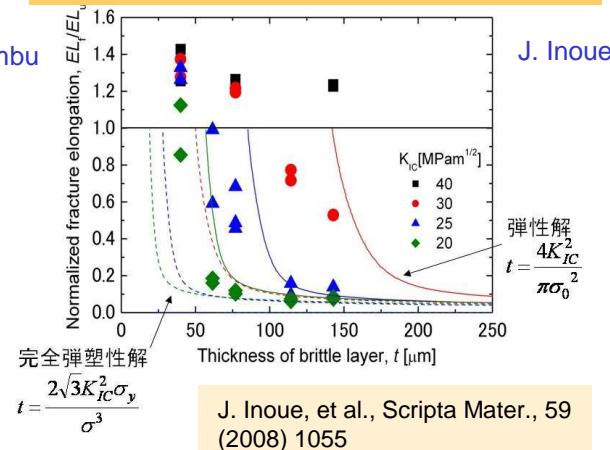
Multi-layered steel is developed to achieve the combinations of ultrahigh strength and high ductility, that have never achieved by conventional steels by controlling interface strength, microstructure and properties of each layer and layer design.

## Control of interface strength

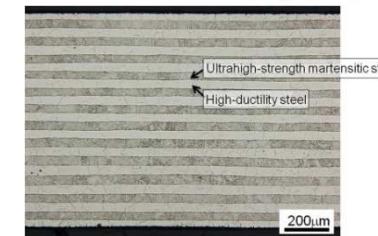
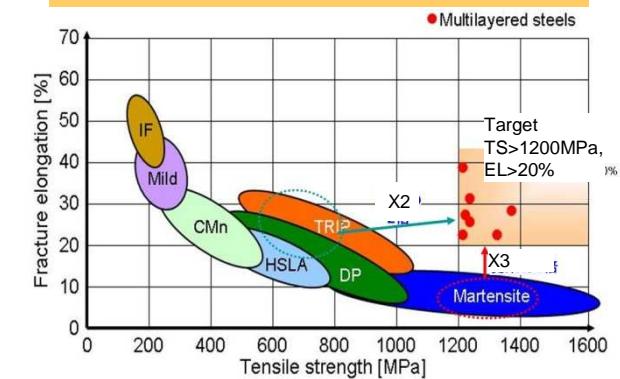


S. Nambu et al., Composites Sci. Technol., 69 (2009), 1936

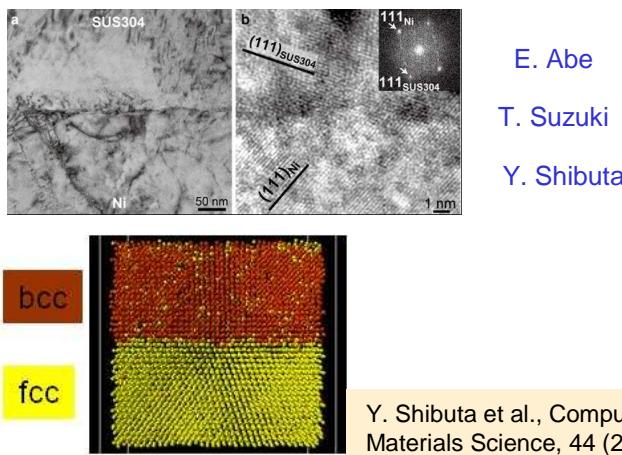
## Control of properties and layer design



## Strength-ductility combinations



## Analysis and simulation of interface



## Formability and deformation analysis



## Reliability analysis

