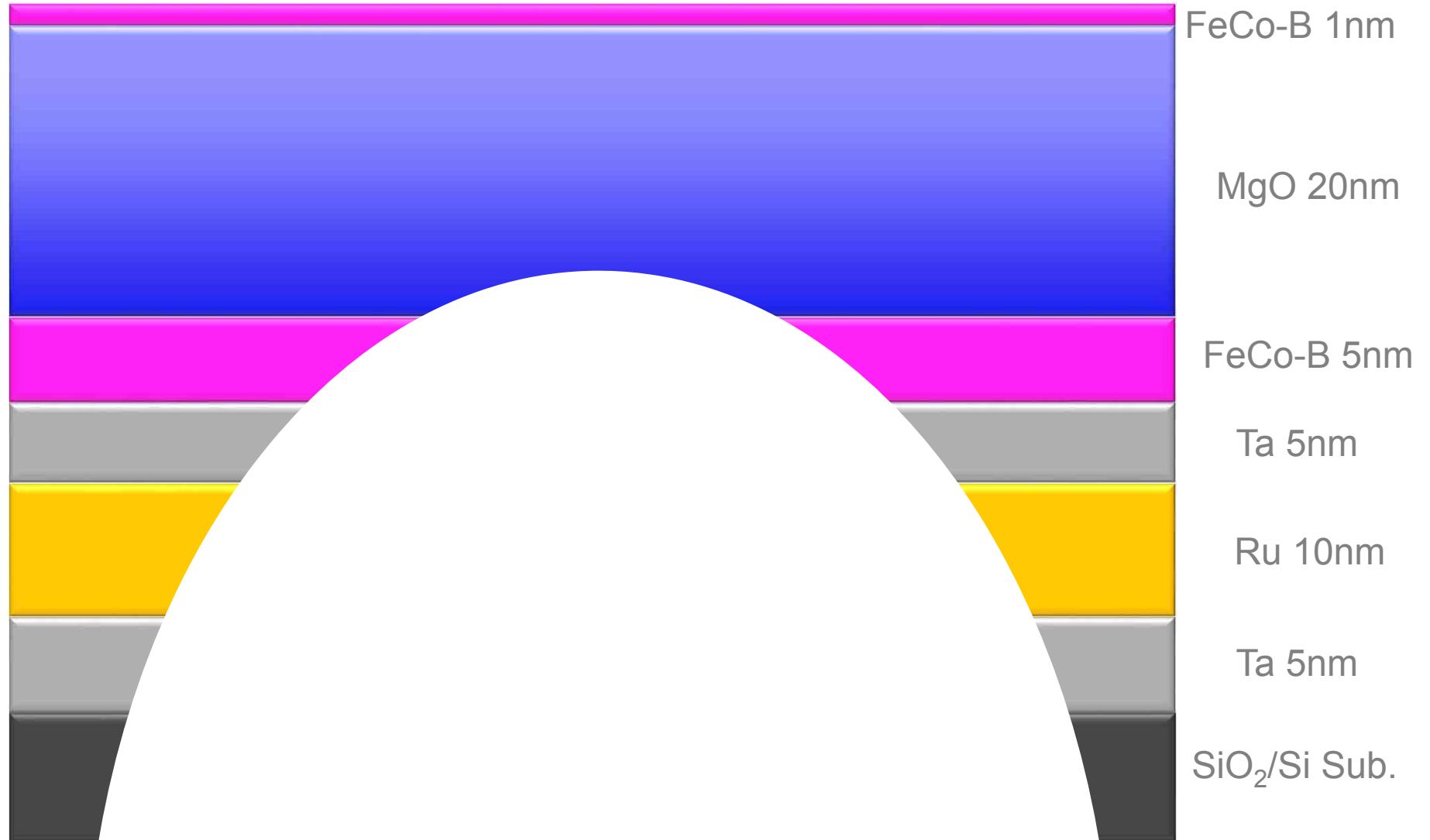
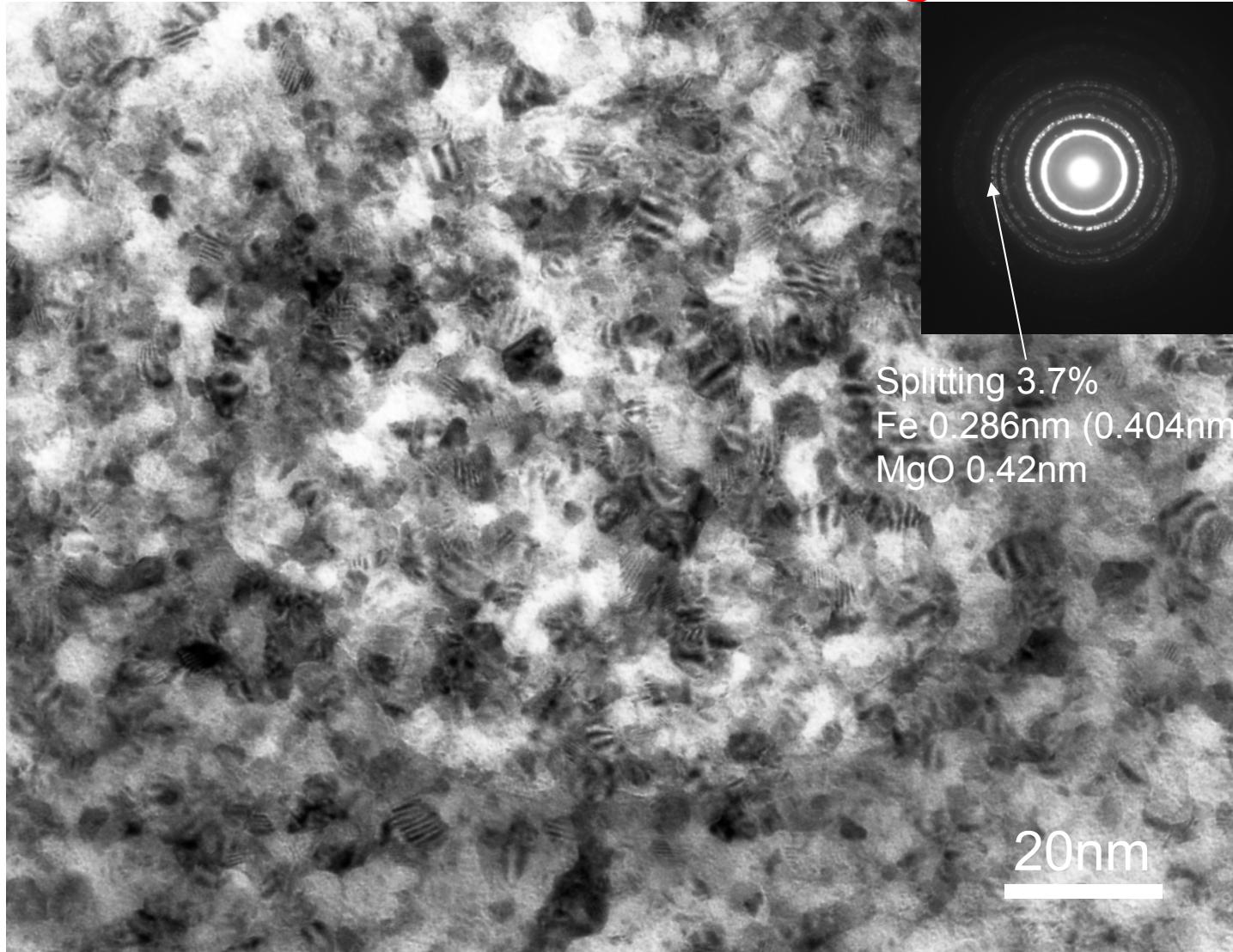


# *Planview Sample*



# *Planview sample new 20nm*

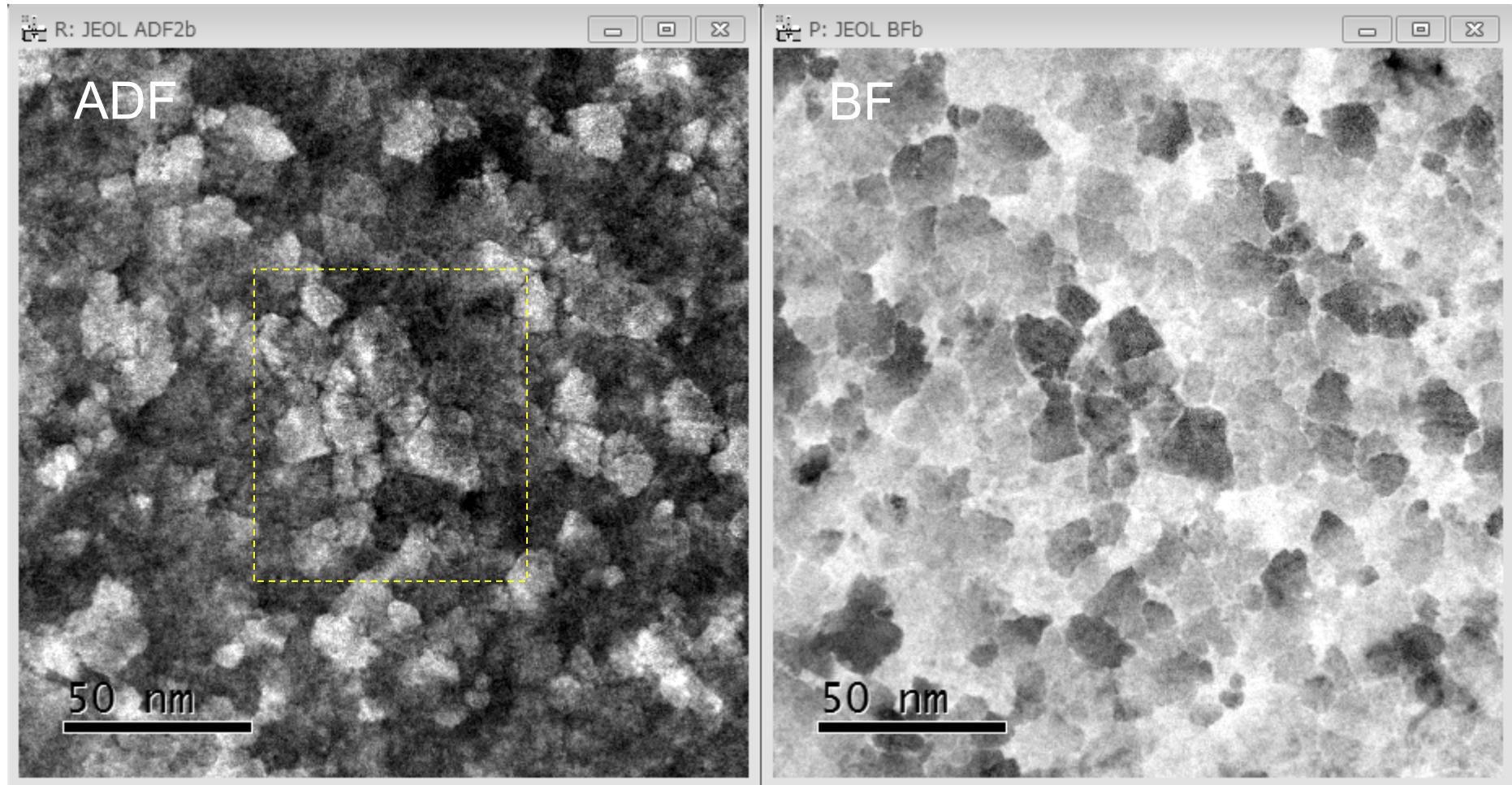
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



MgO texture structure: 5-10nm diameter

# *Planview sample new 20nm*

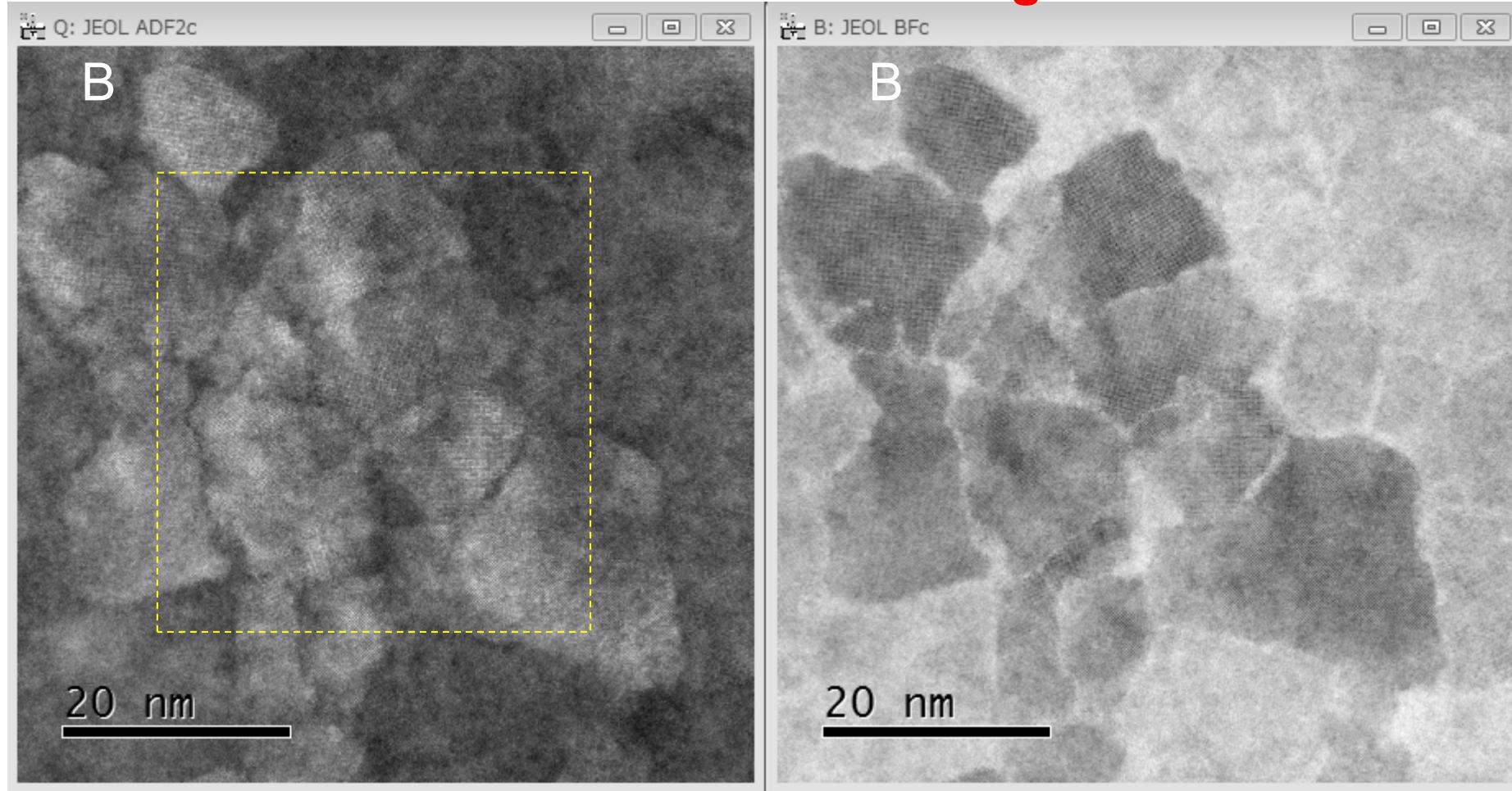
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



MgO texture structure: 5-10nm diameter

# *Planview sample new 20nm*

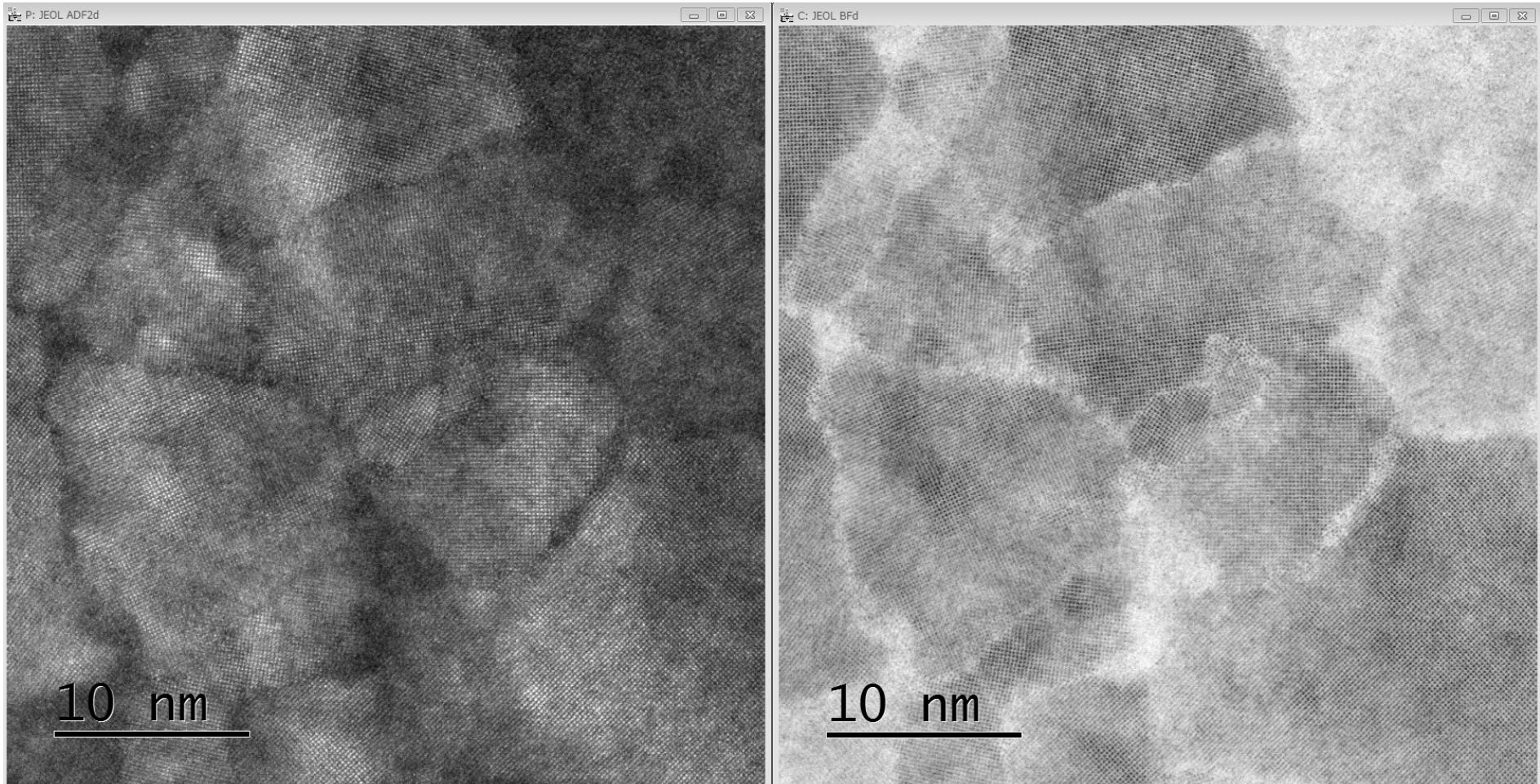
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



GBs are not amorphous and not secondary phase.

# *Planview sample 20nm MgO*

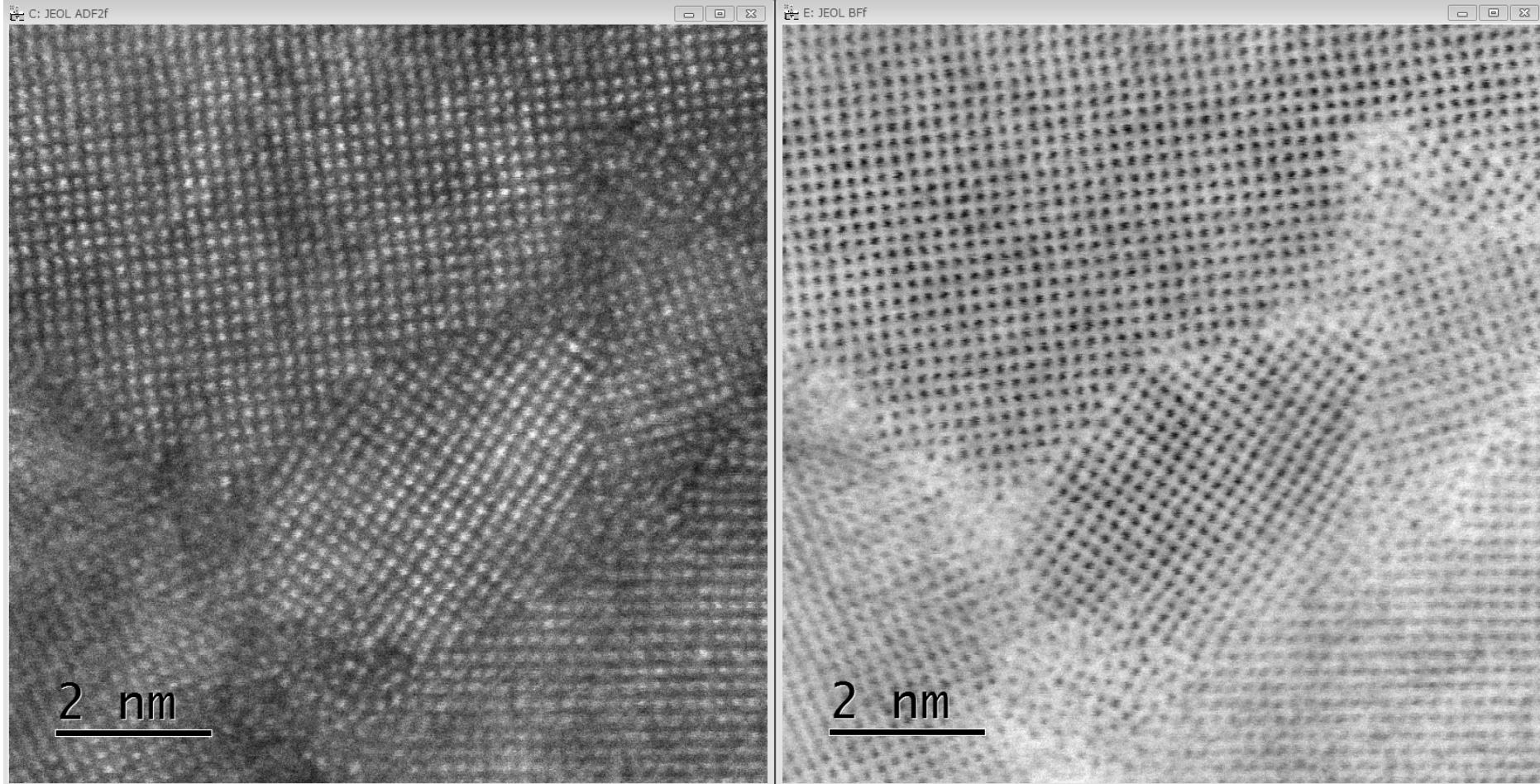
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



Not flat GB

# *Planview sample 20nm MgO*

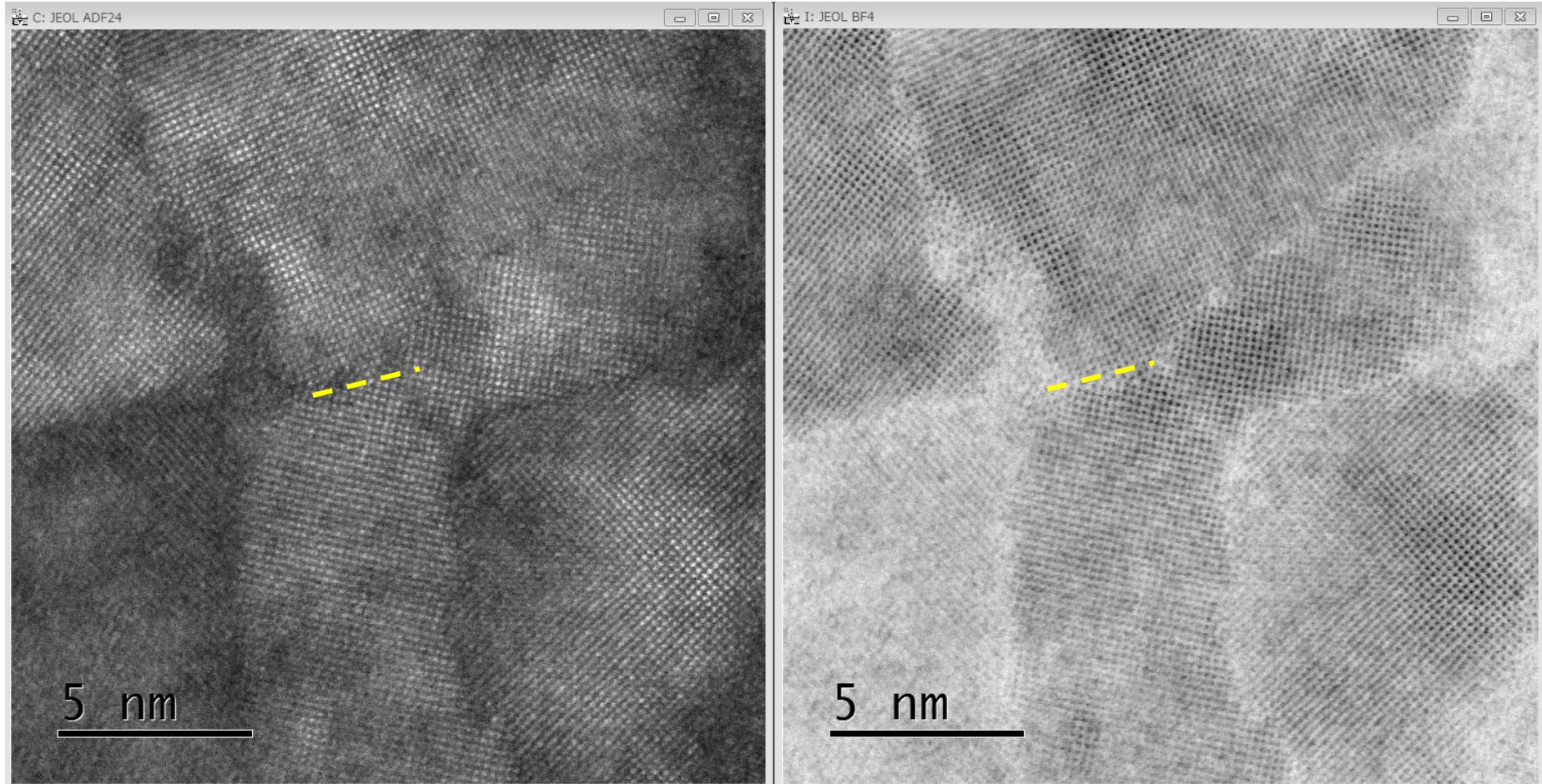
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



Not flat GB

# *Planview sample 20nm MgO*

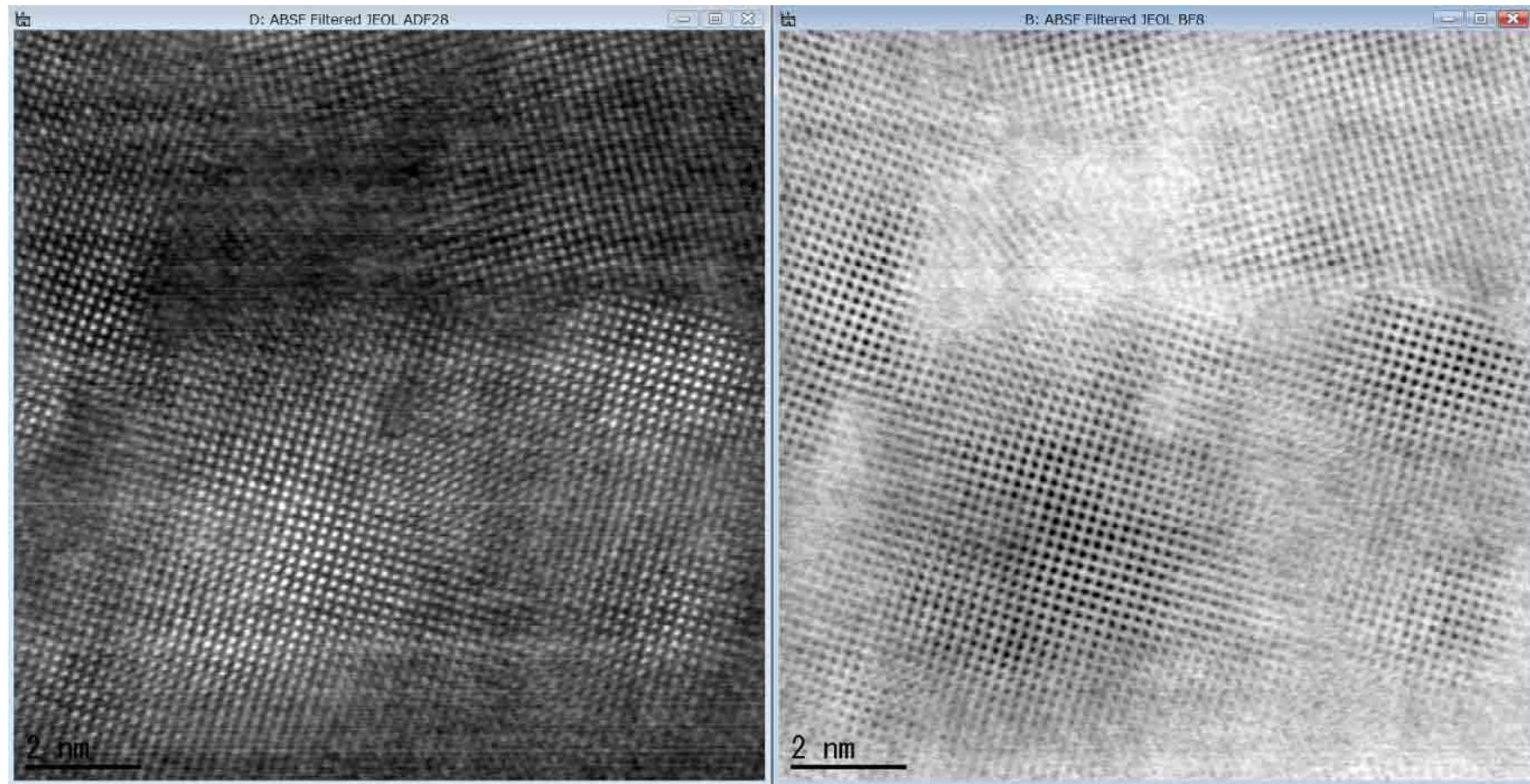
Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



Sigma 5 (36deg) Orientation Relationship

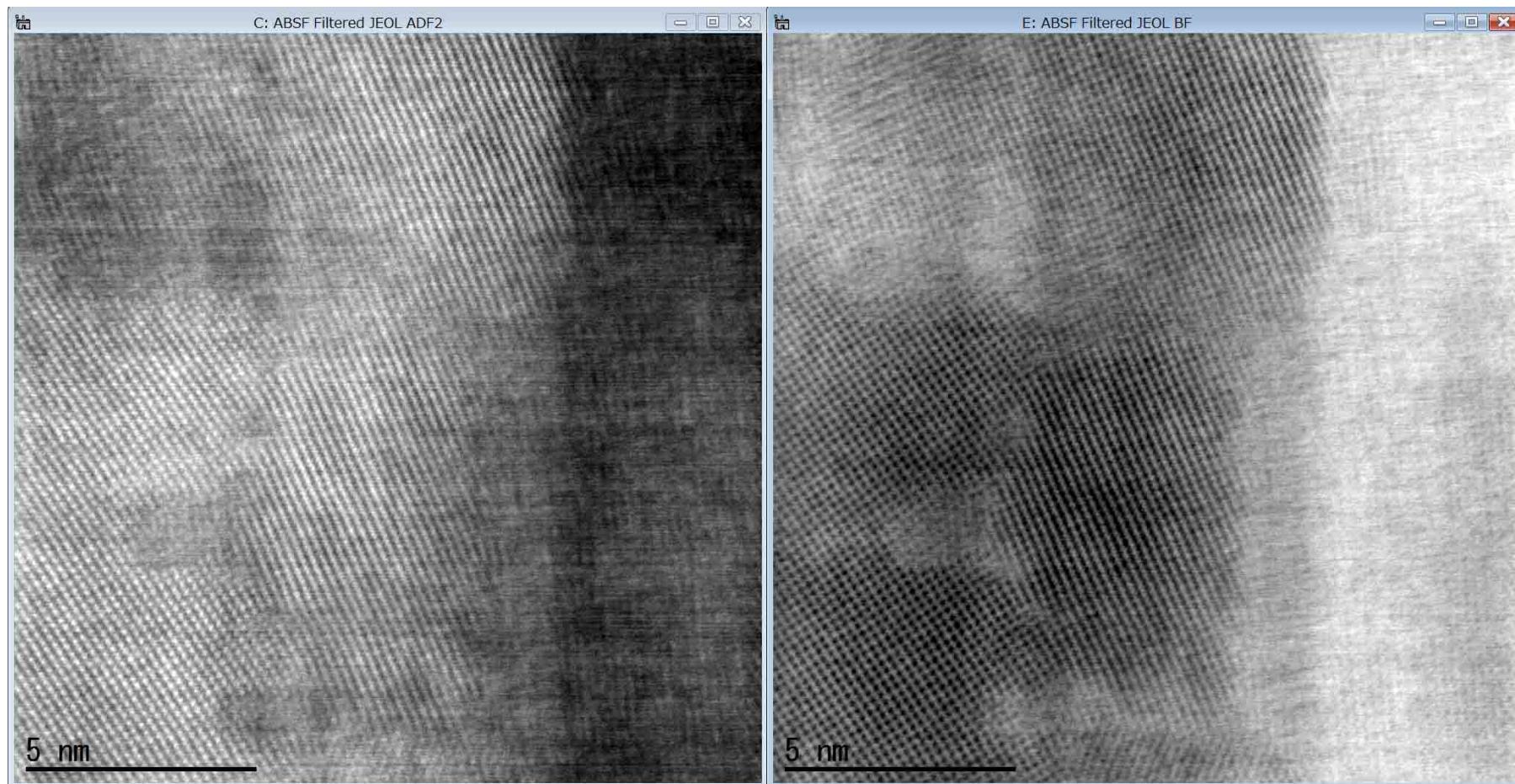
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



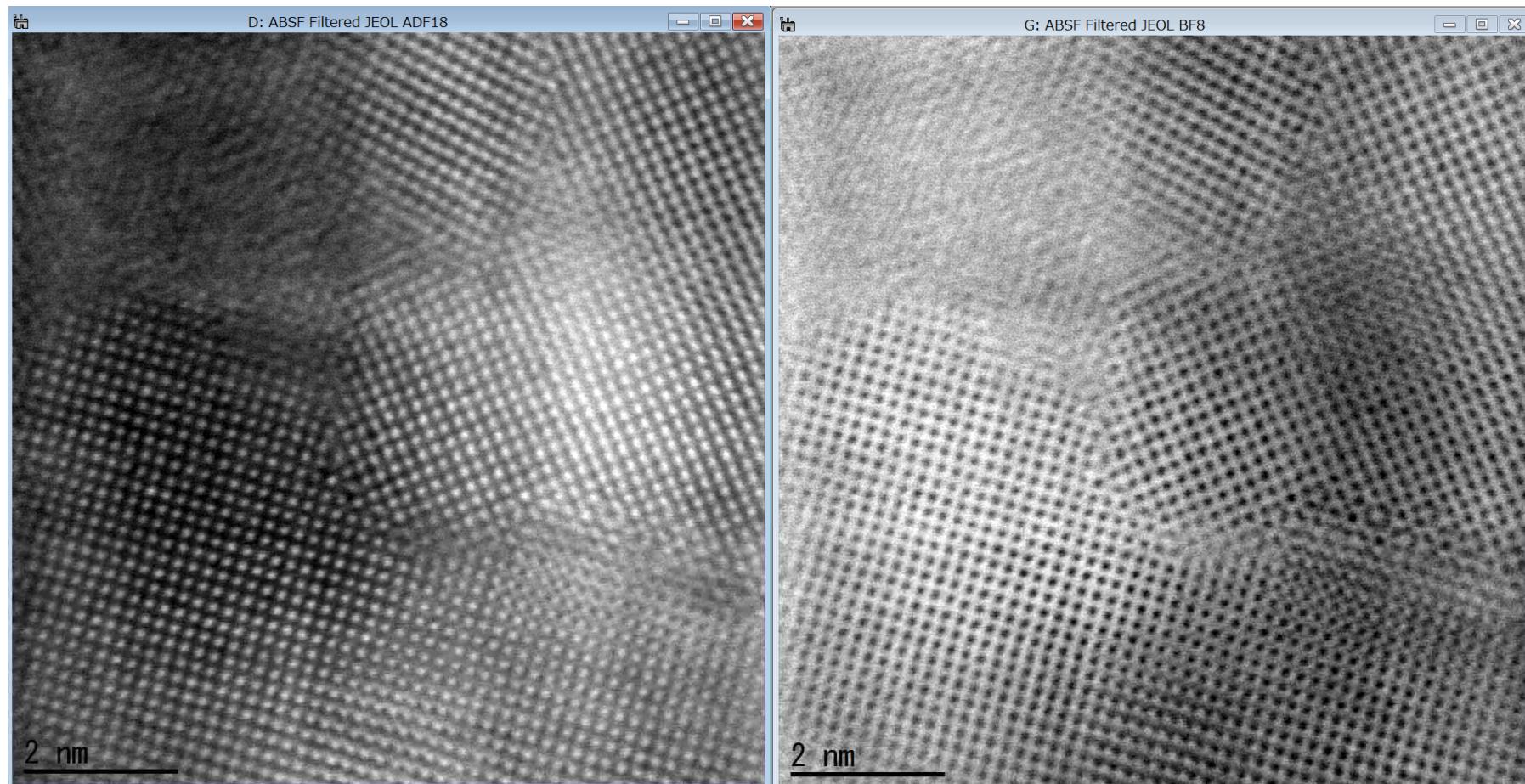
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



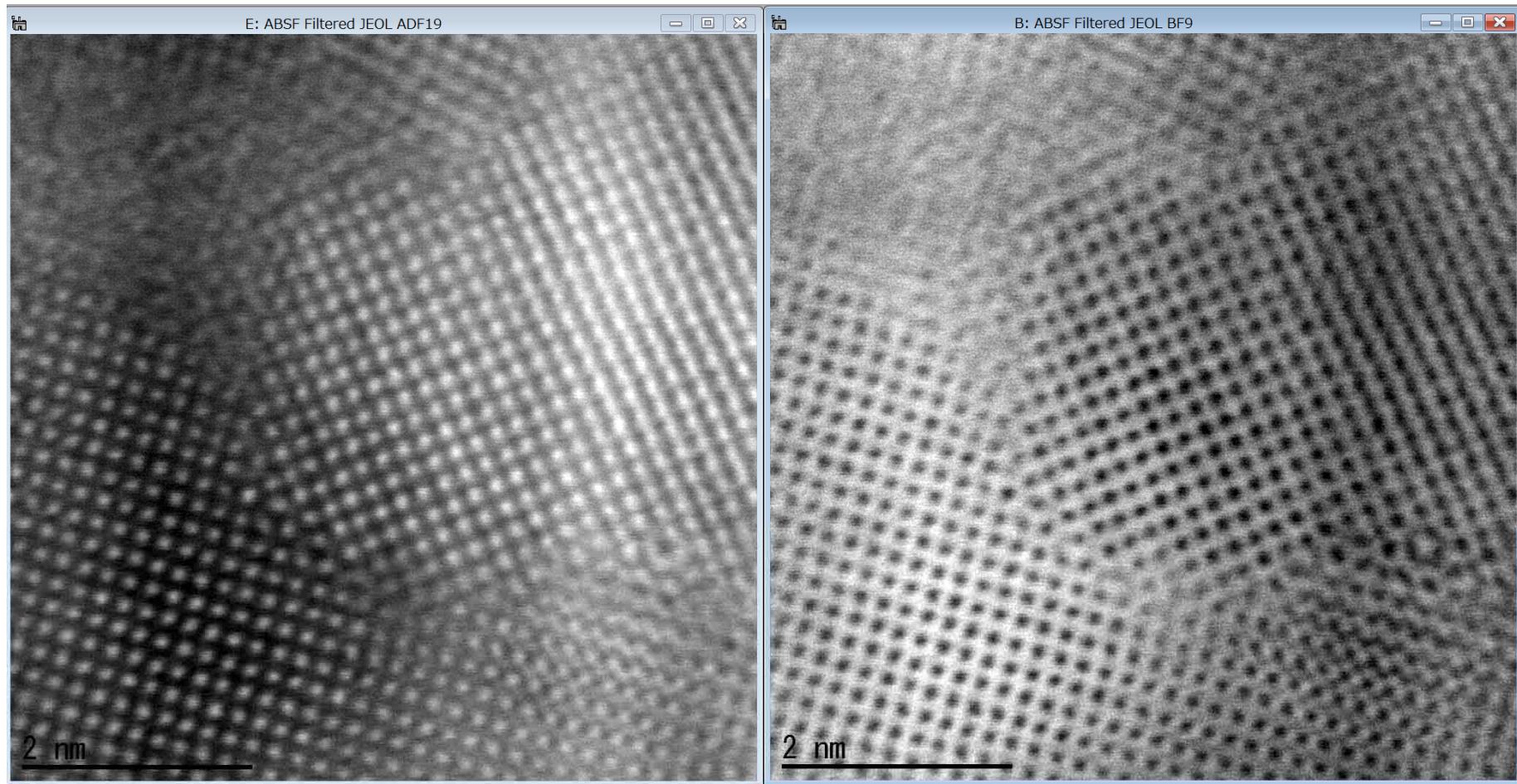
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



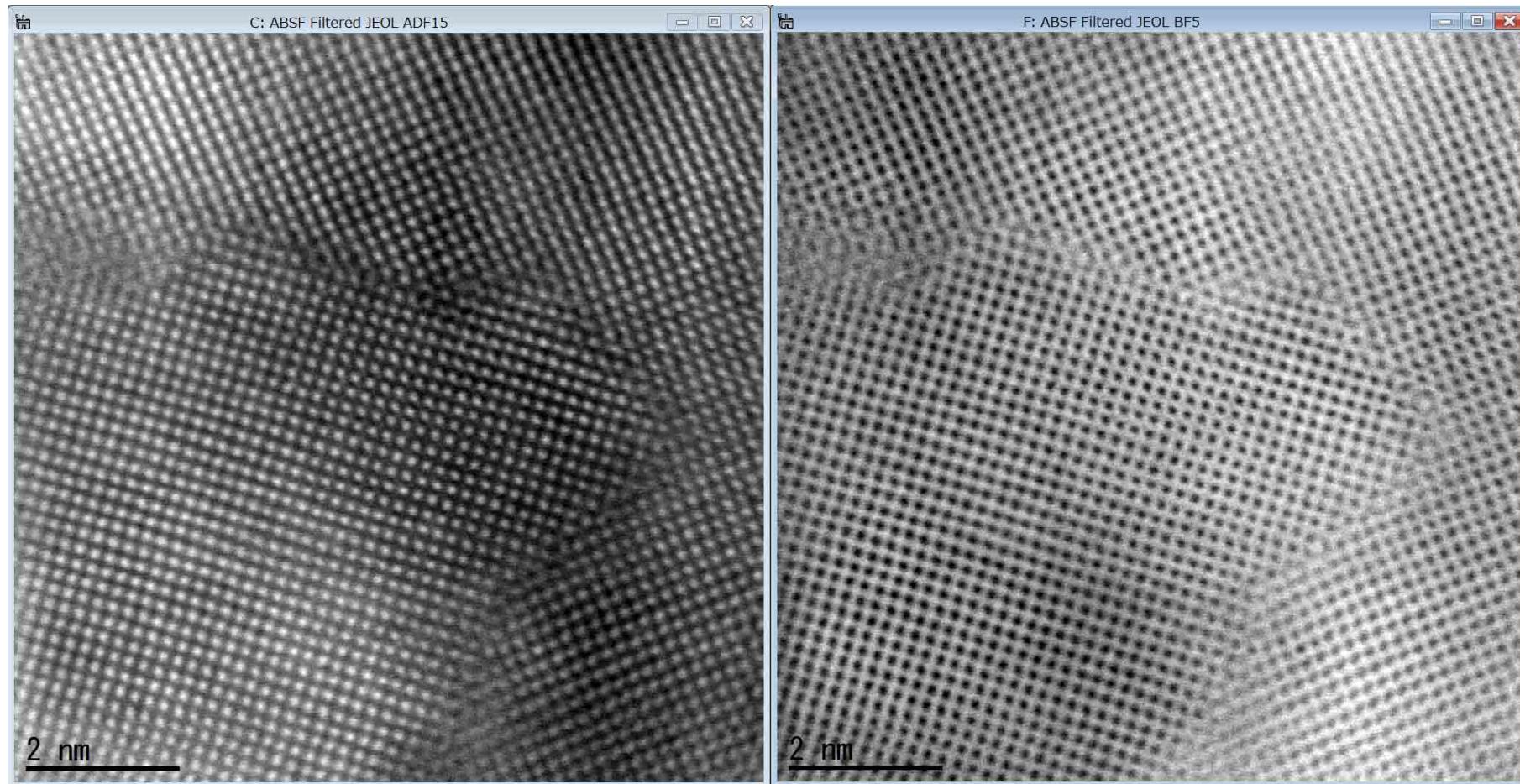
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



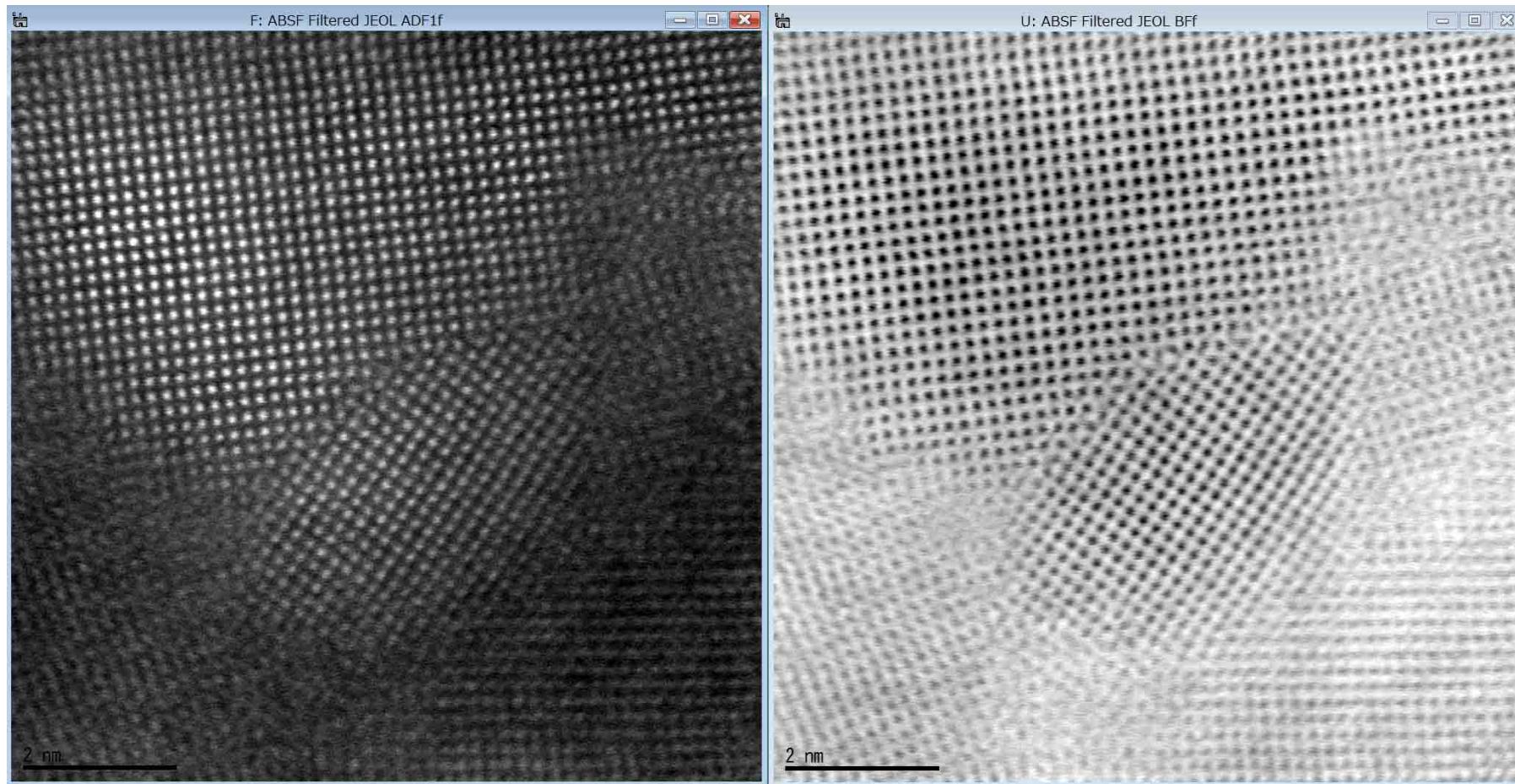
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



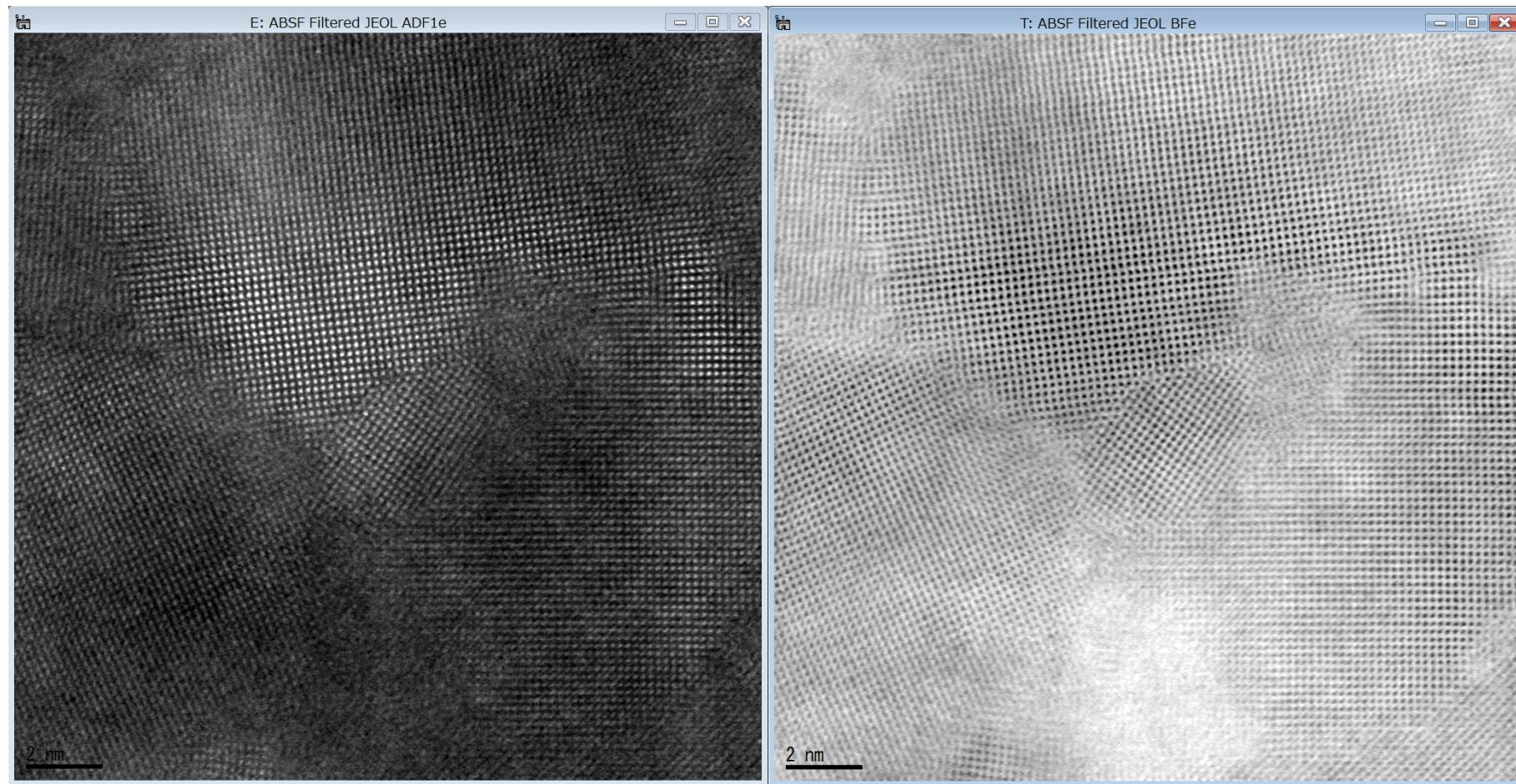
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



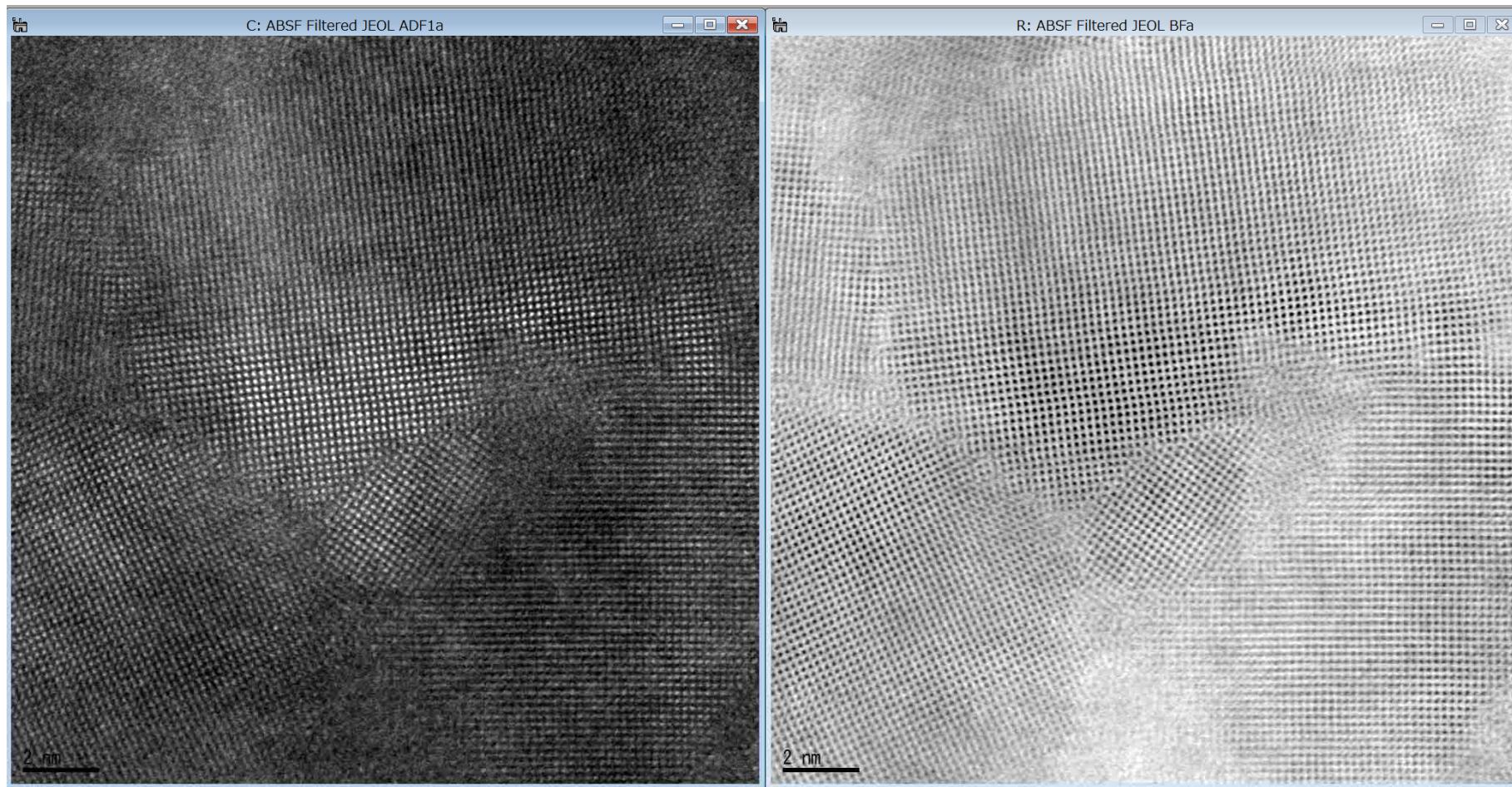
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



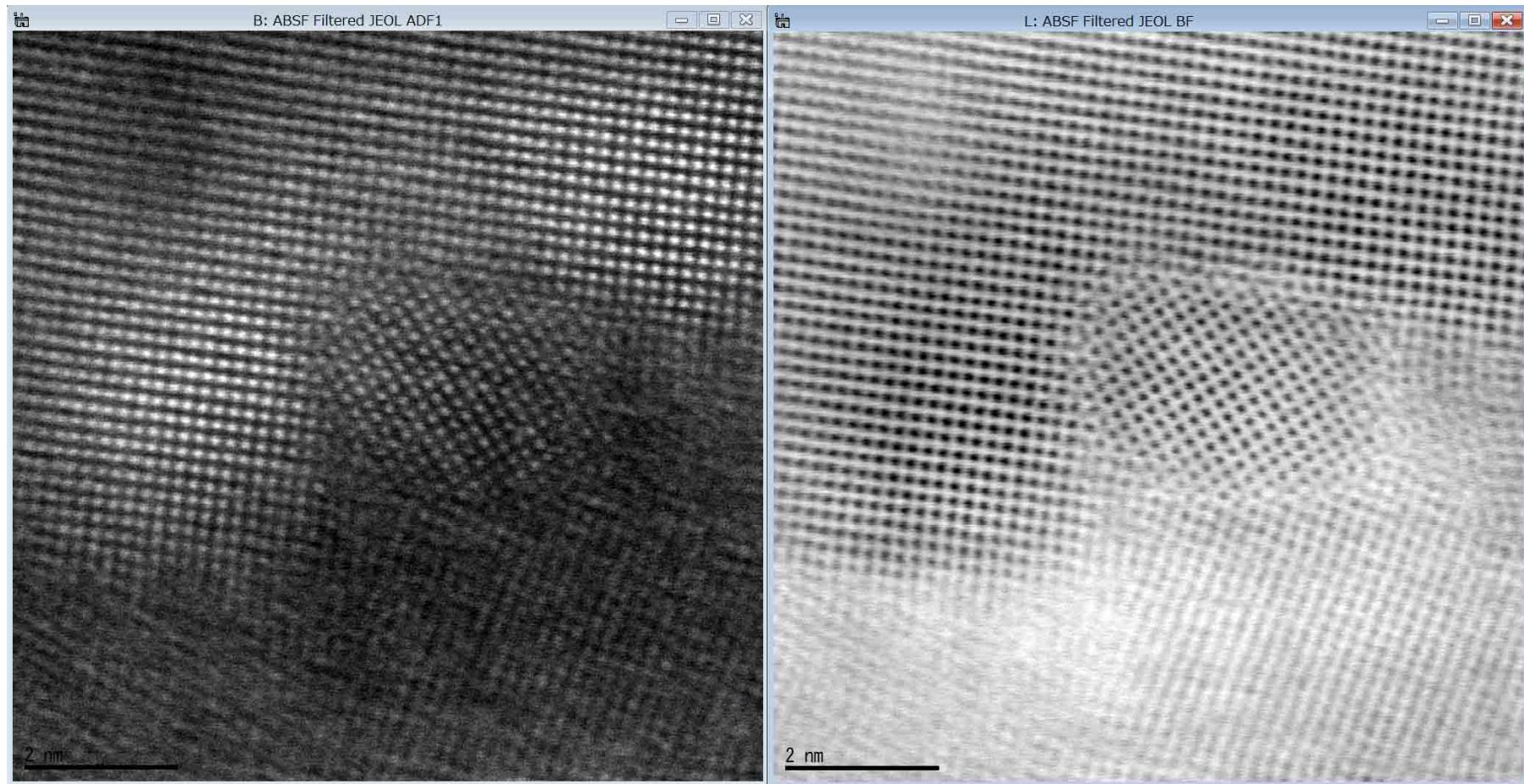
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



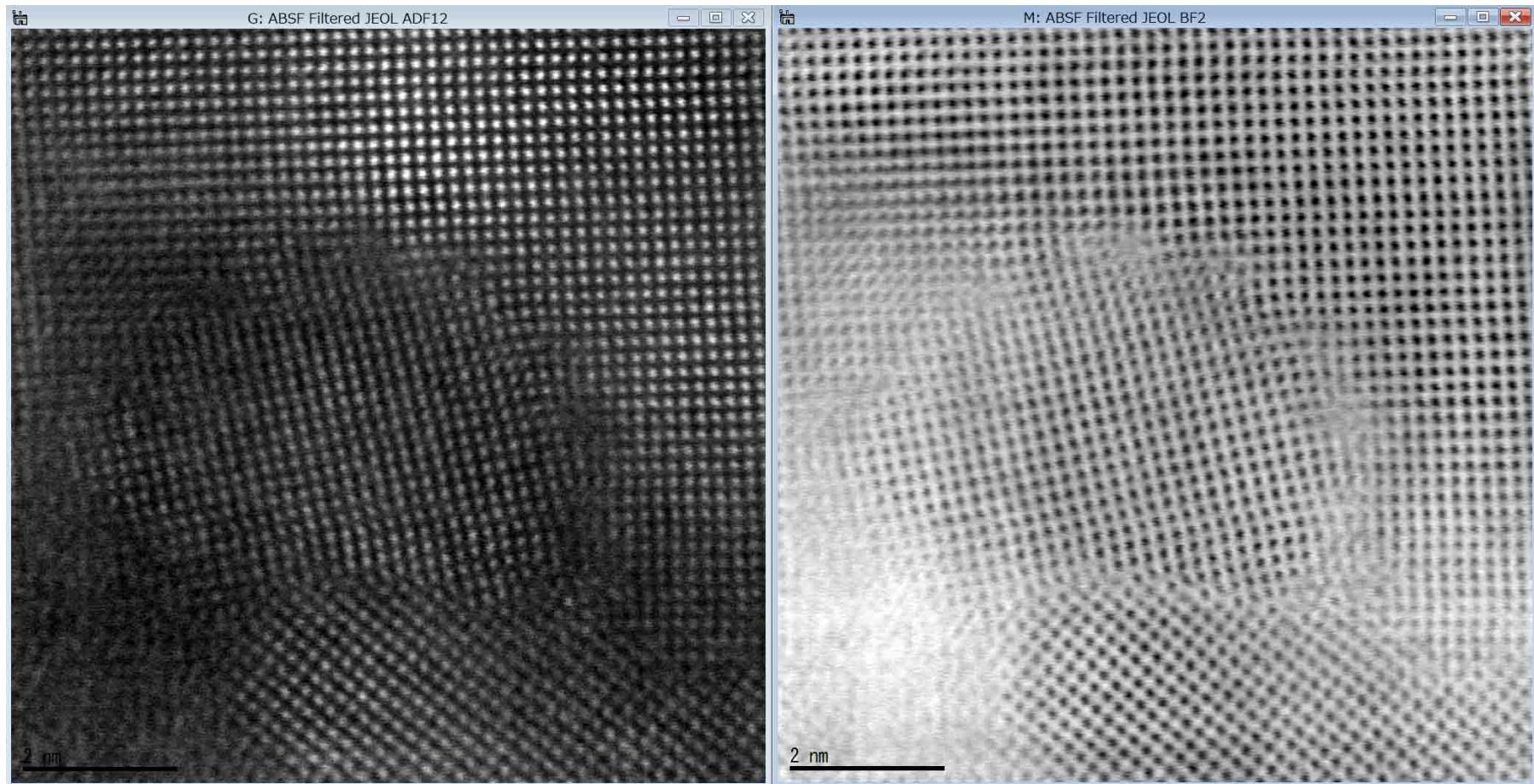
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



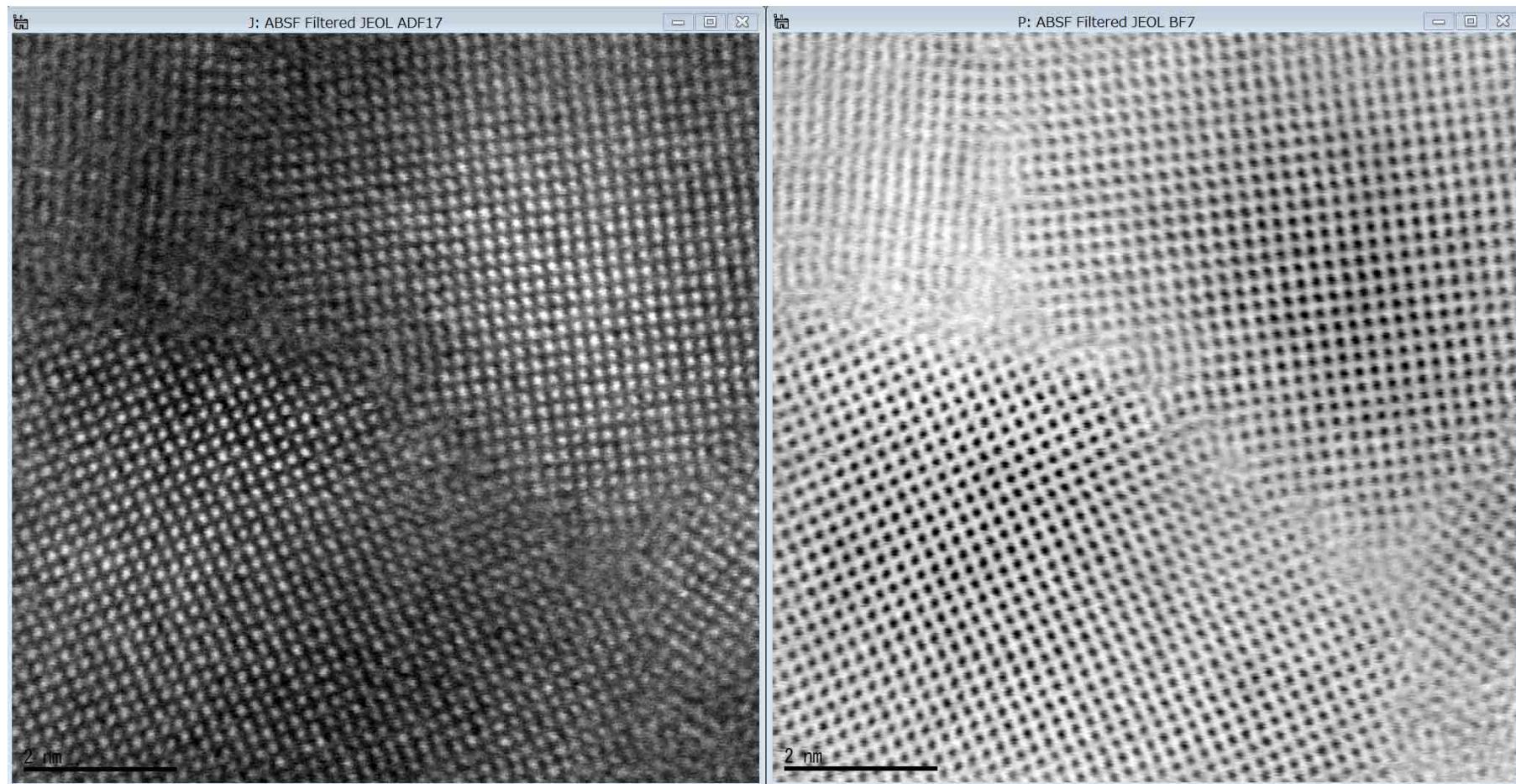
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



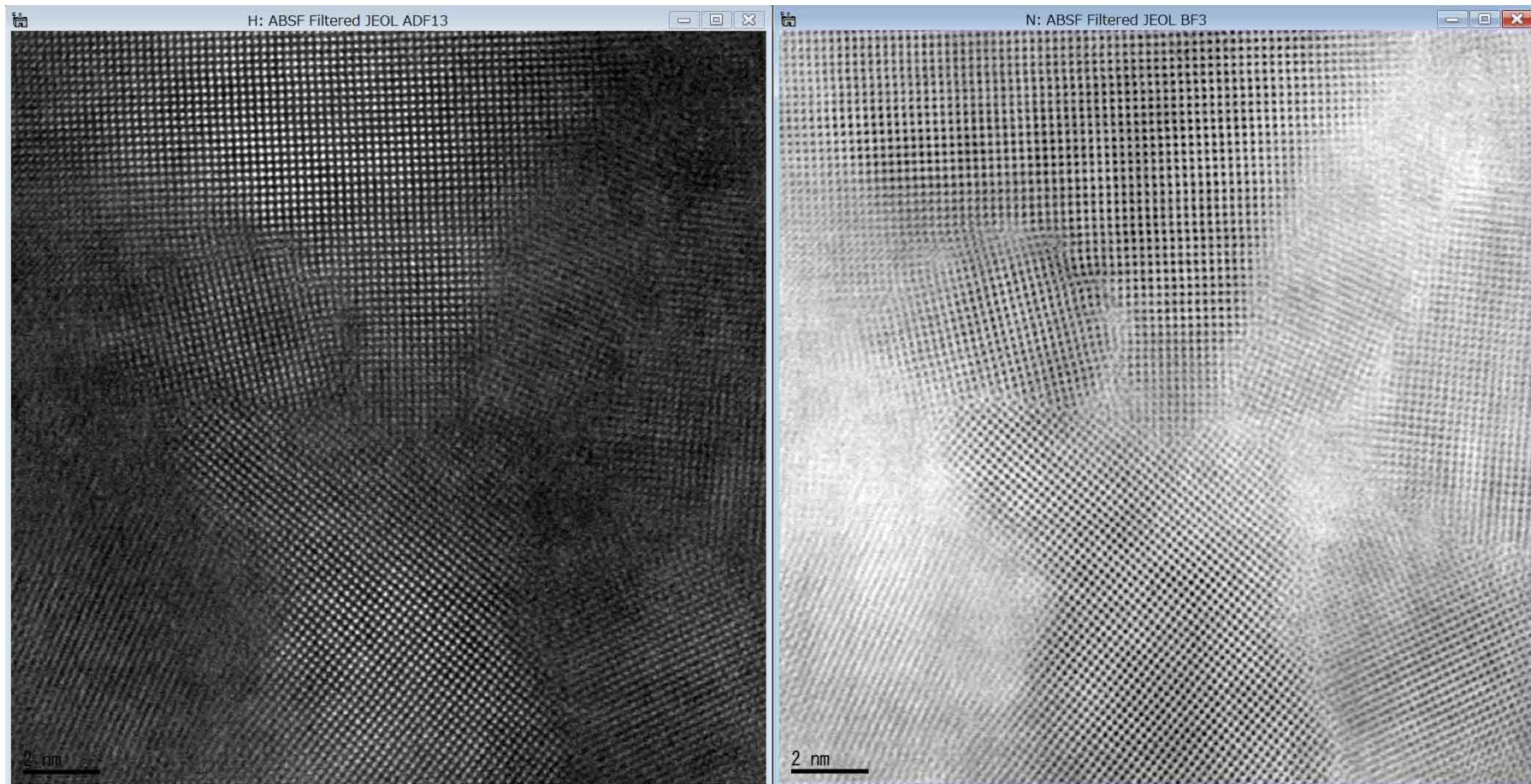
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



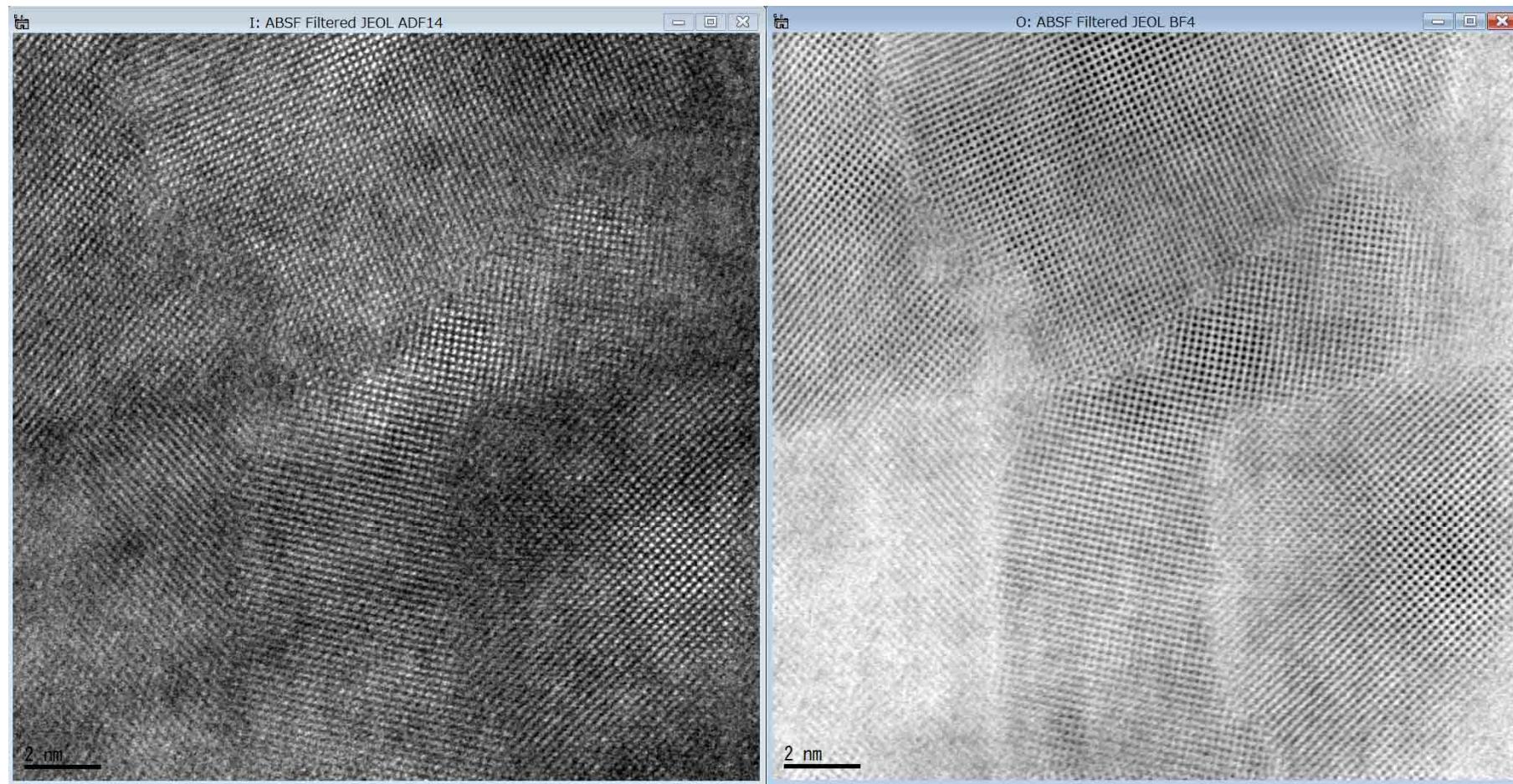
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



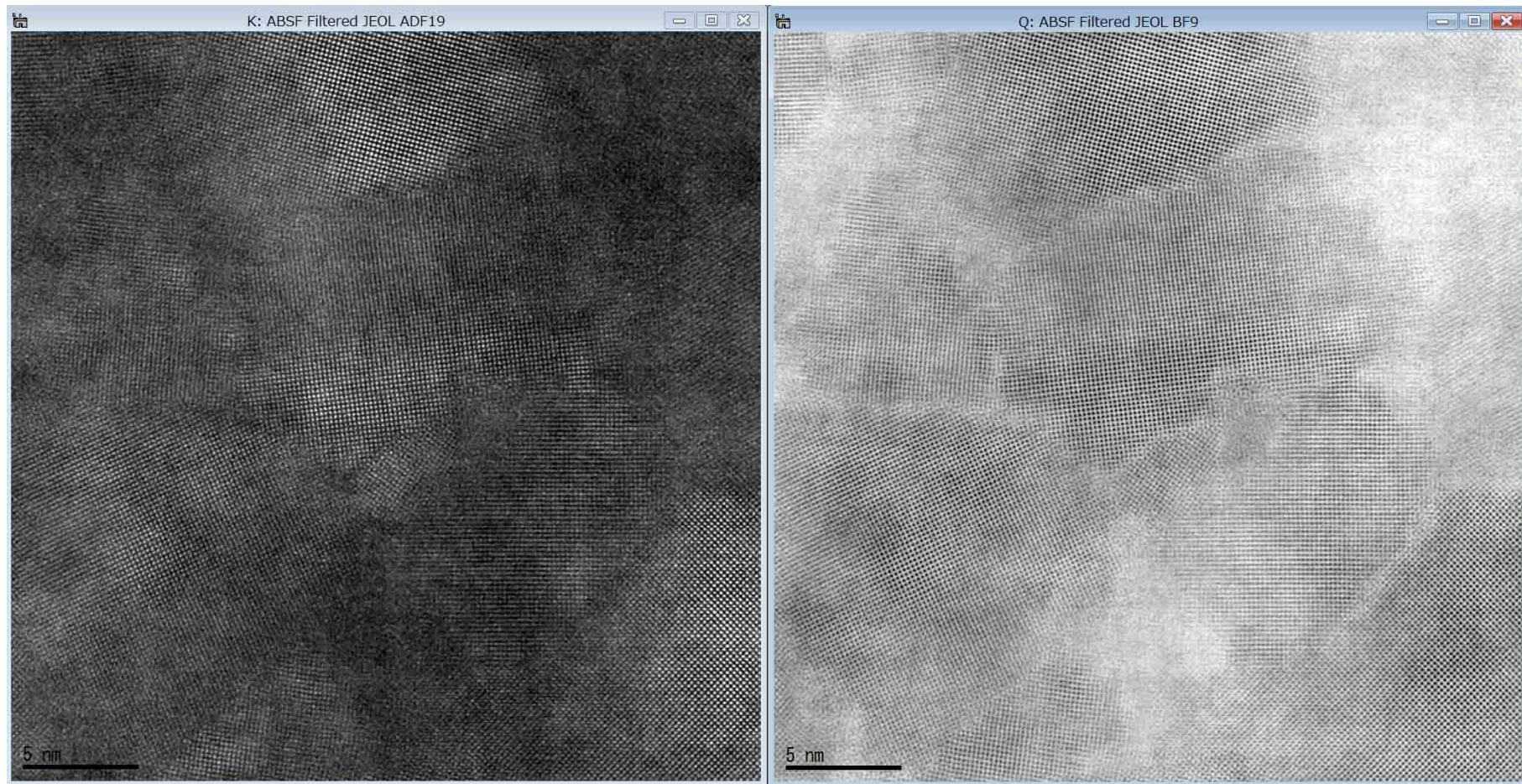
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



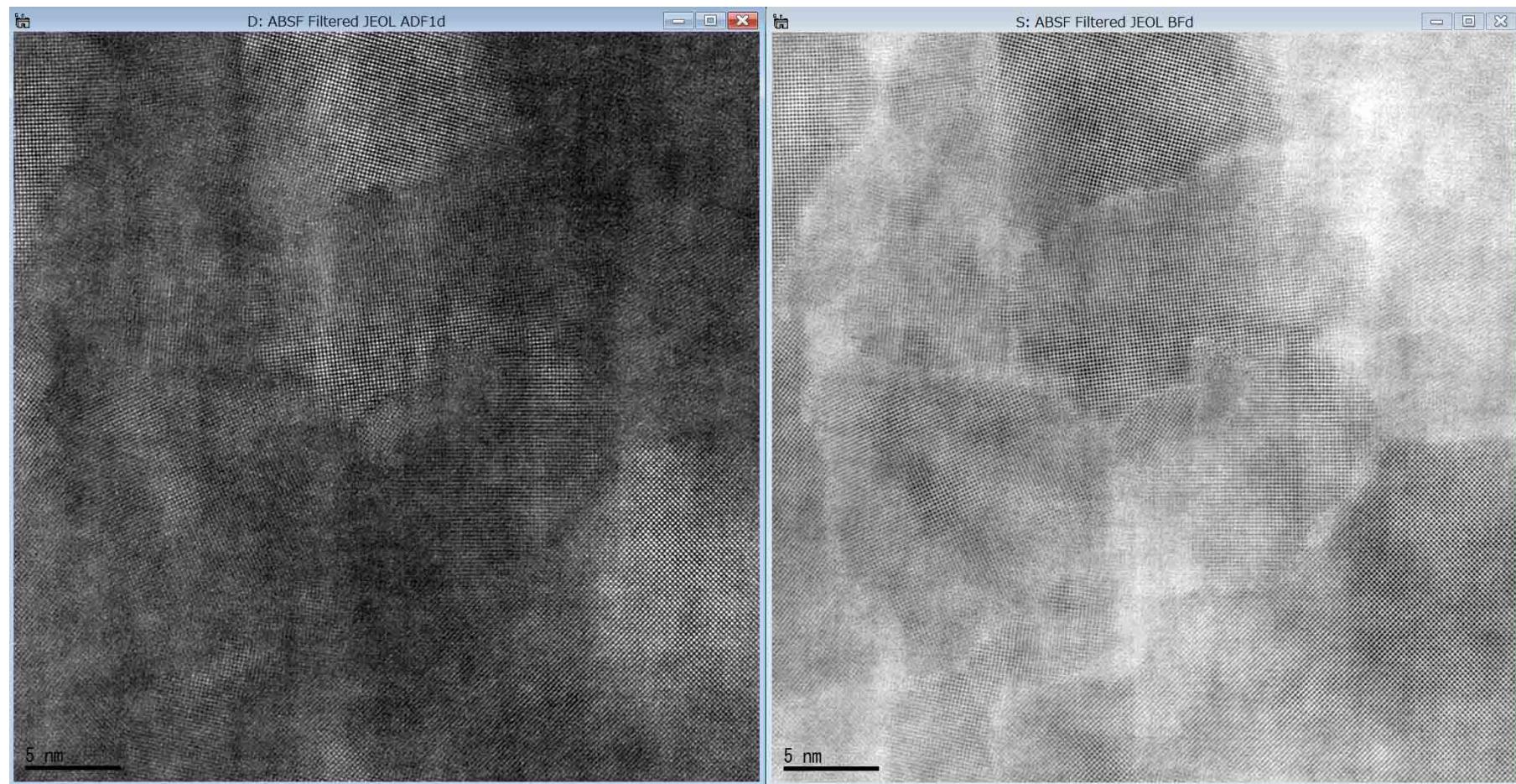
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



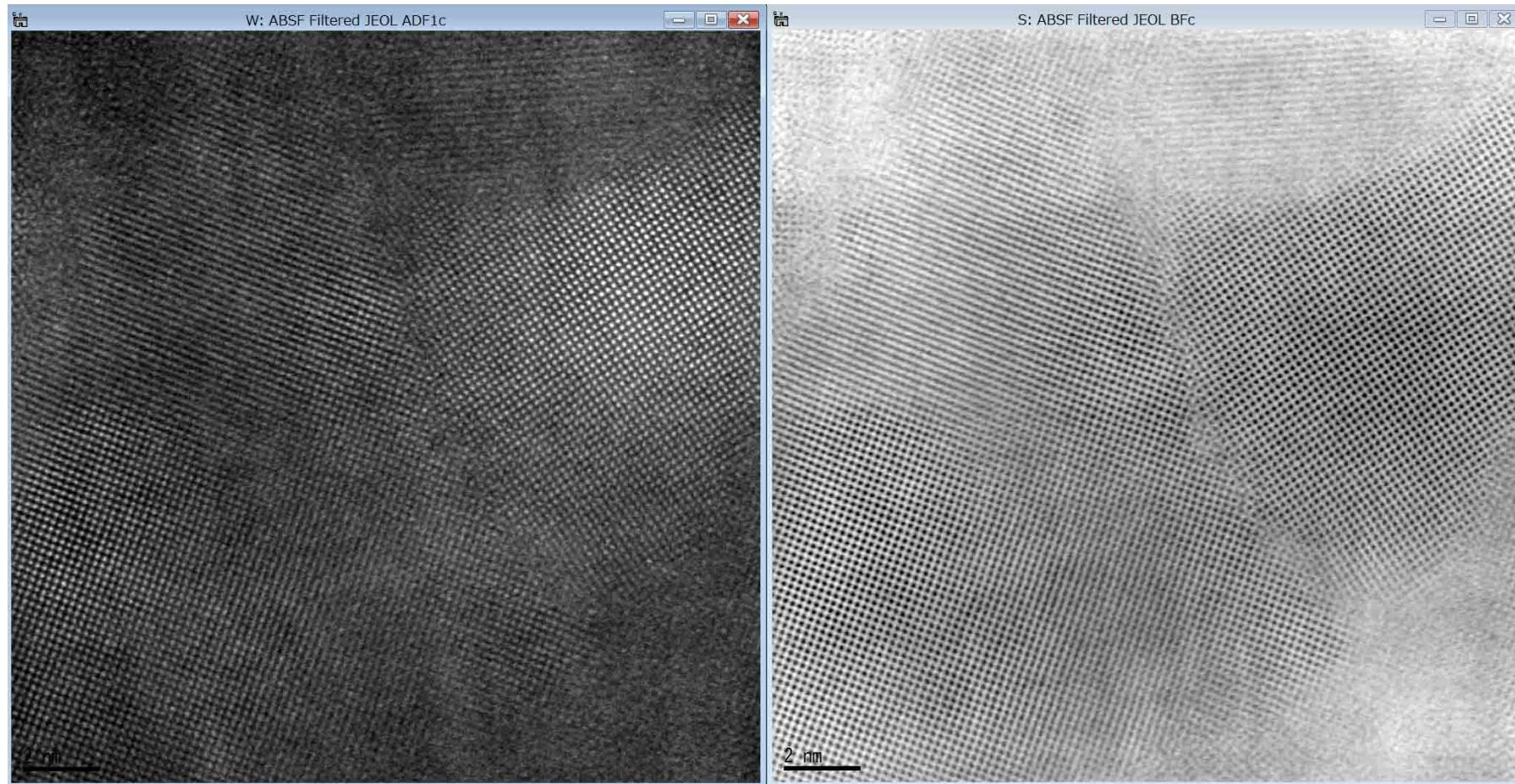
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



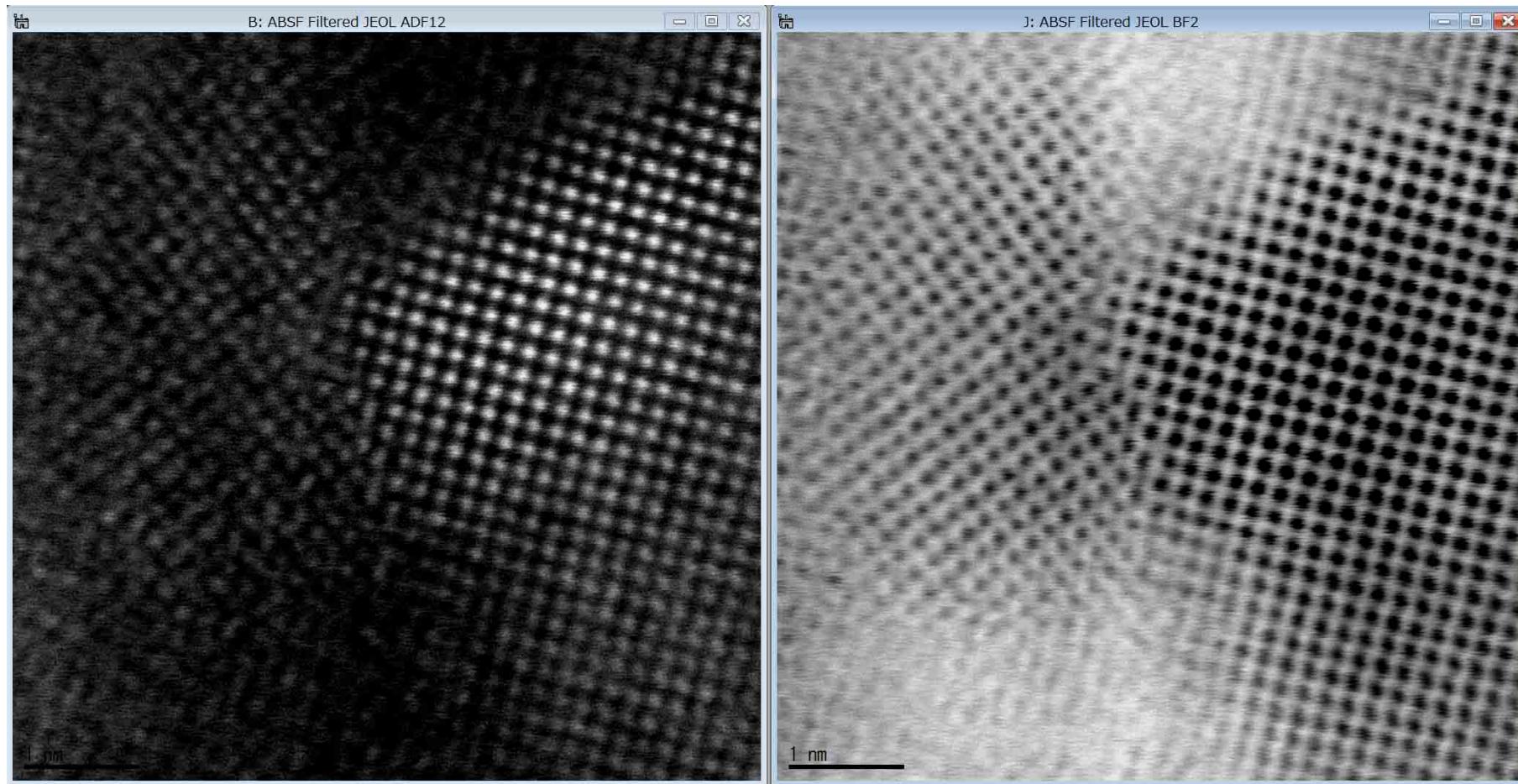
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



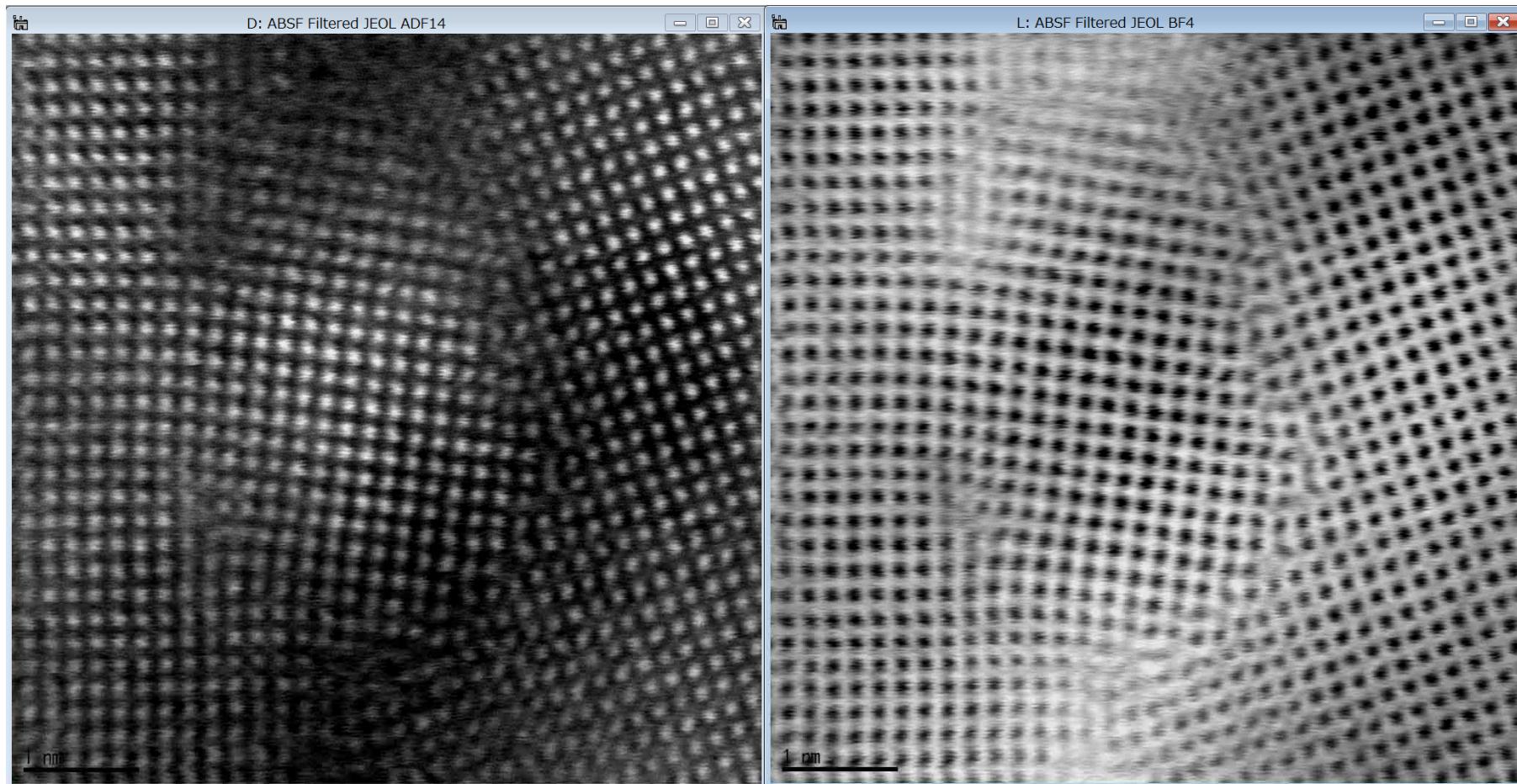
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



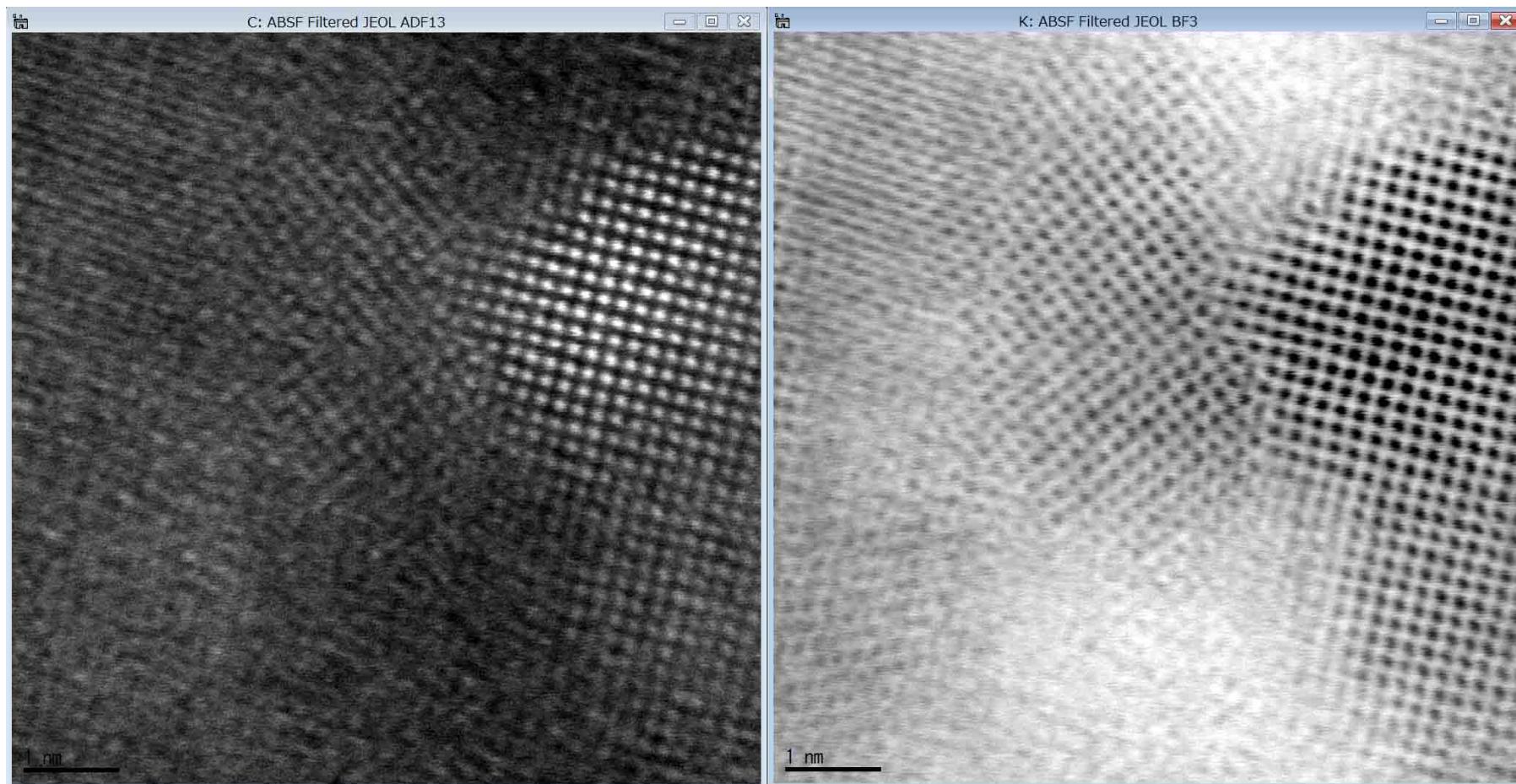
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



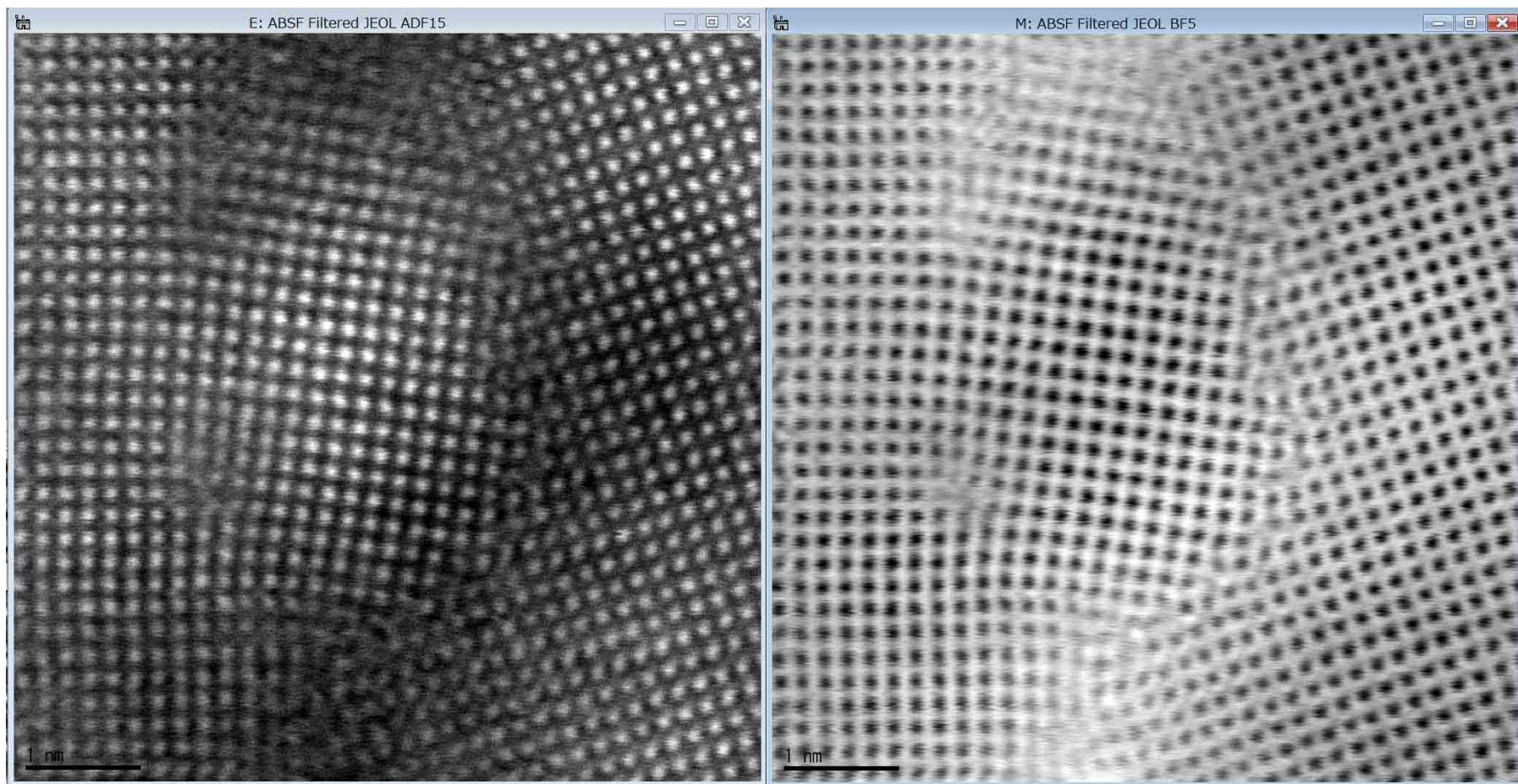
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



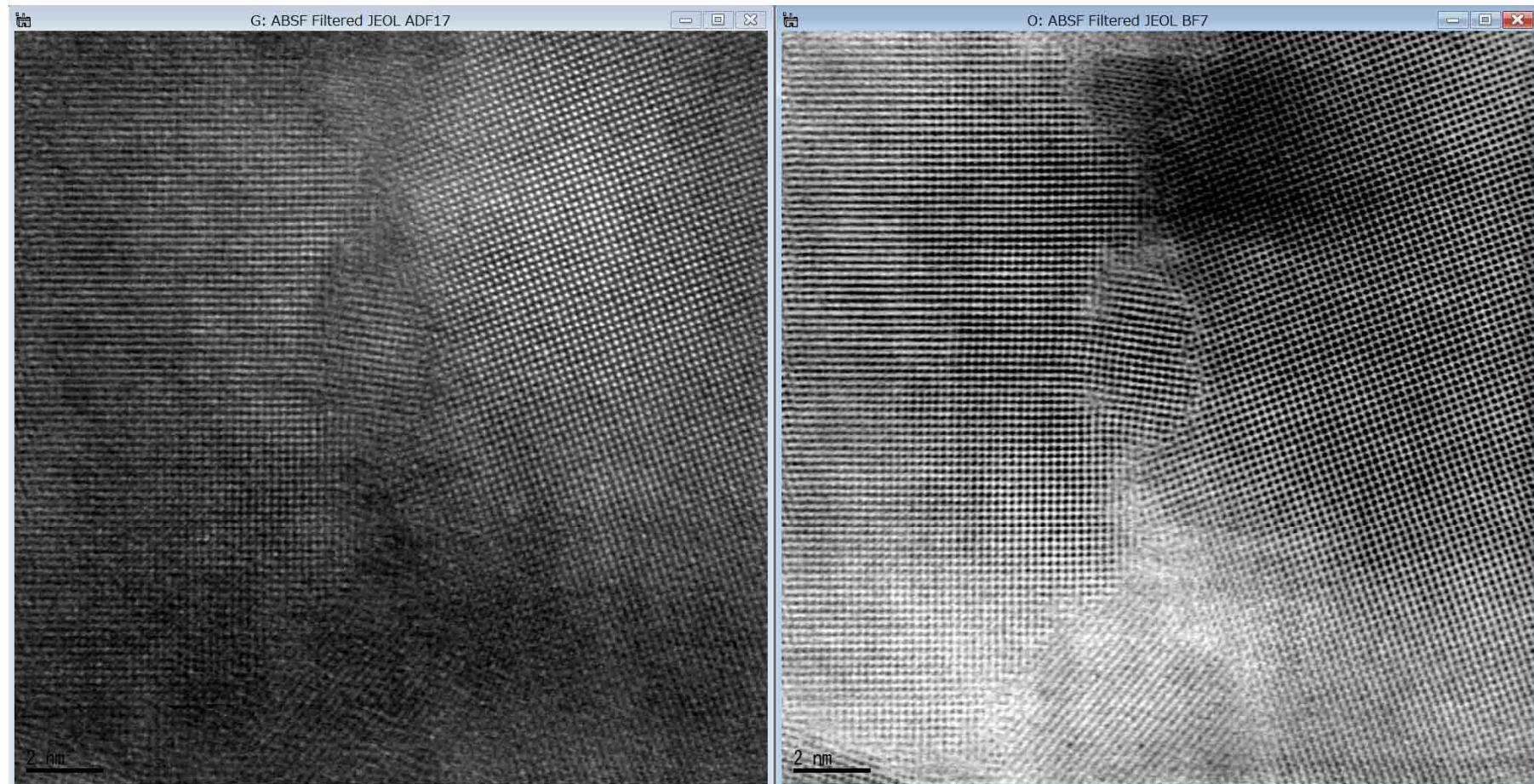
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



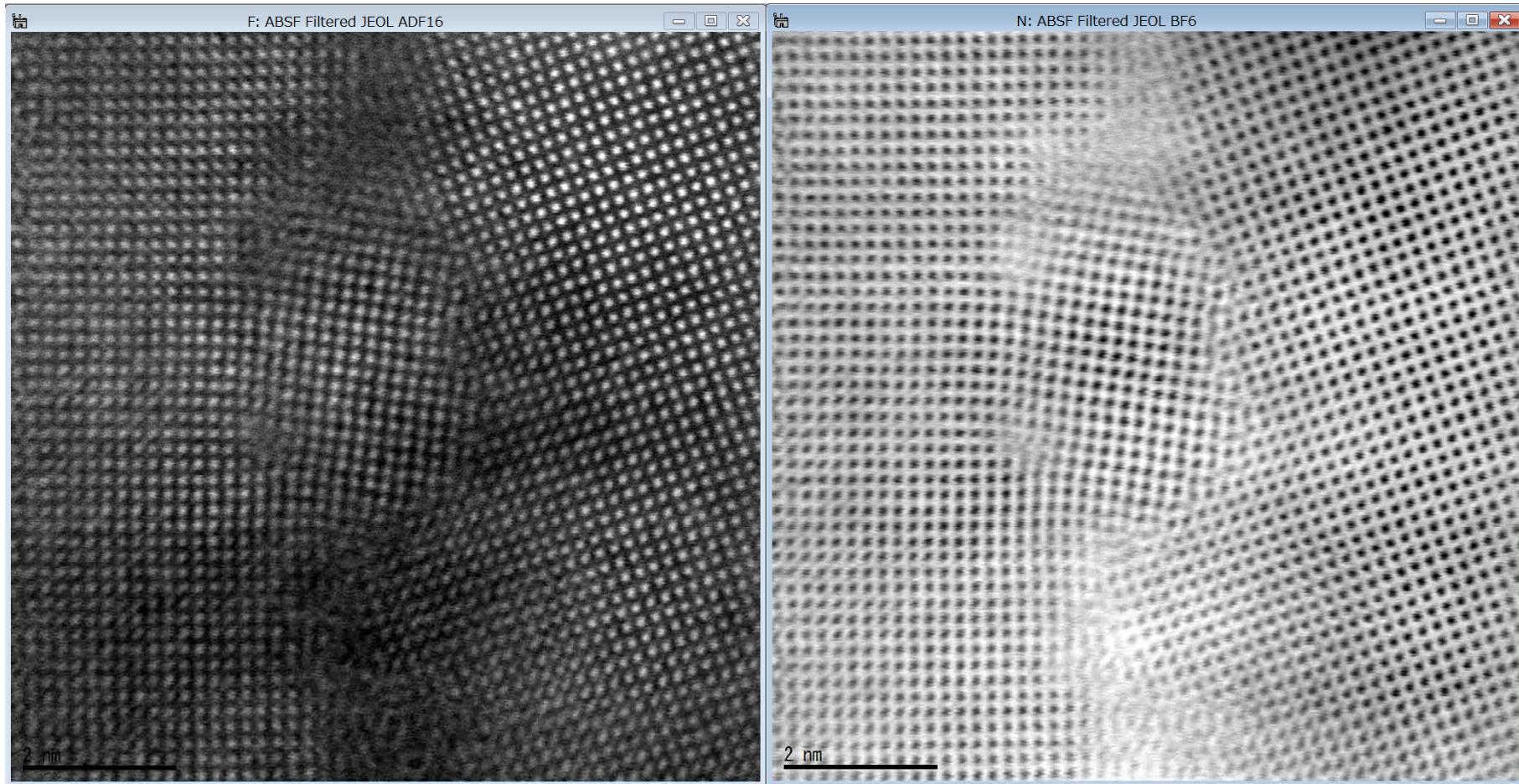
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



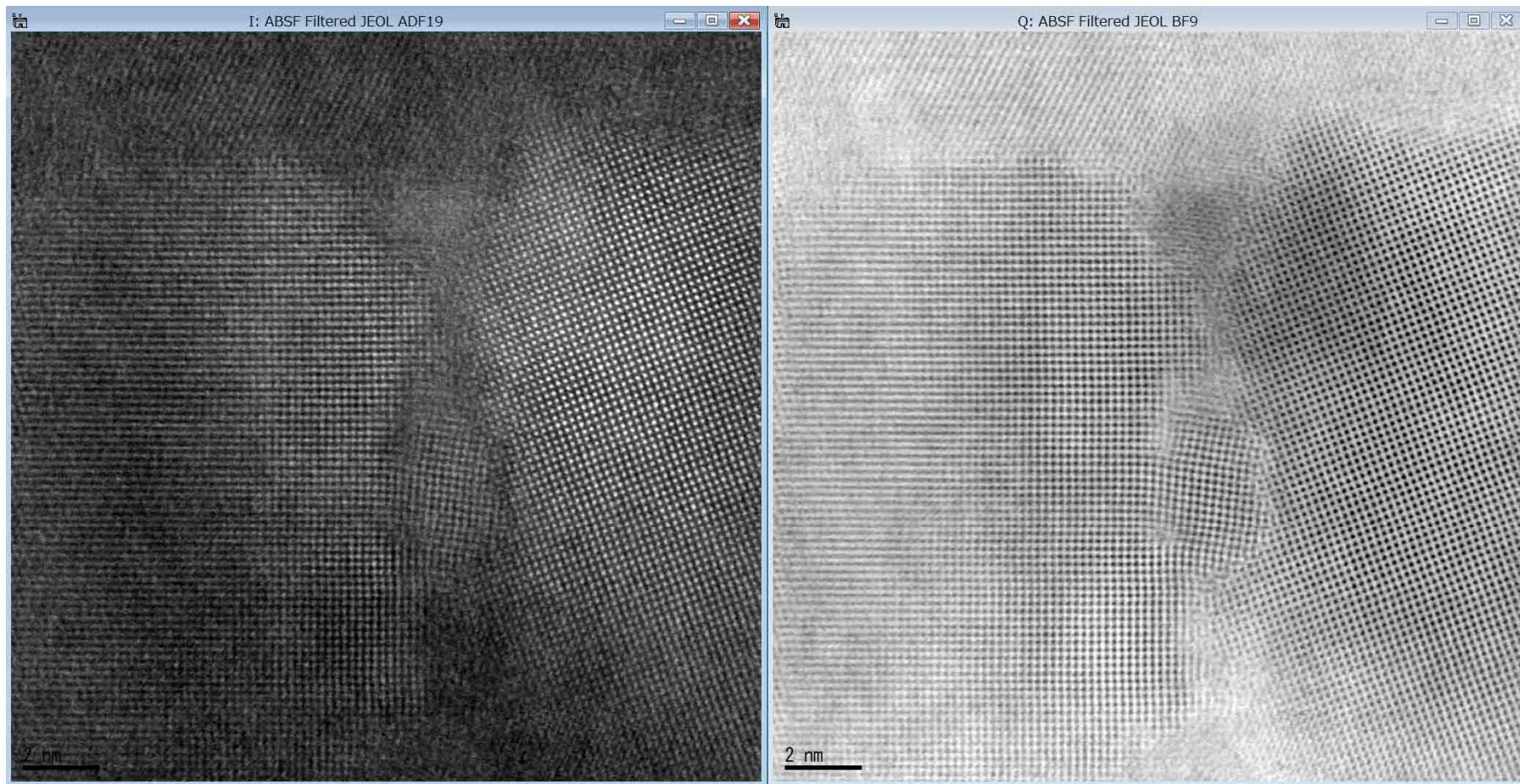
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



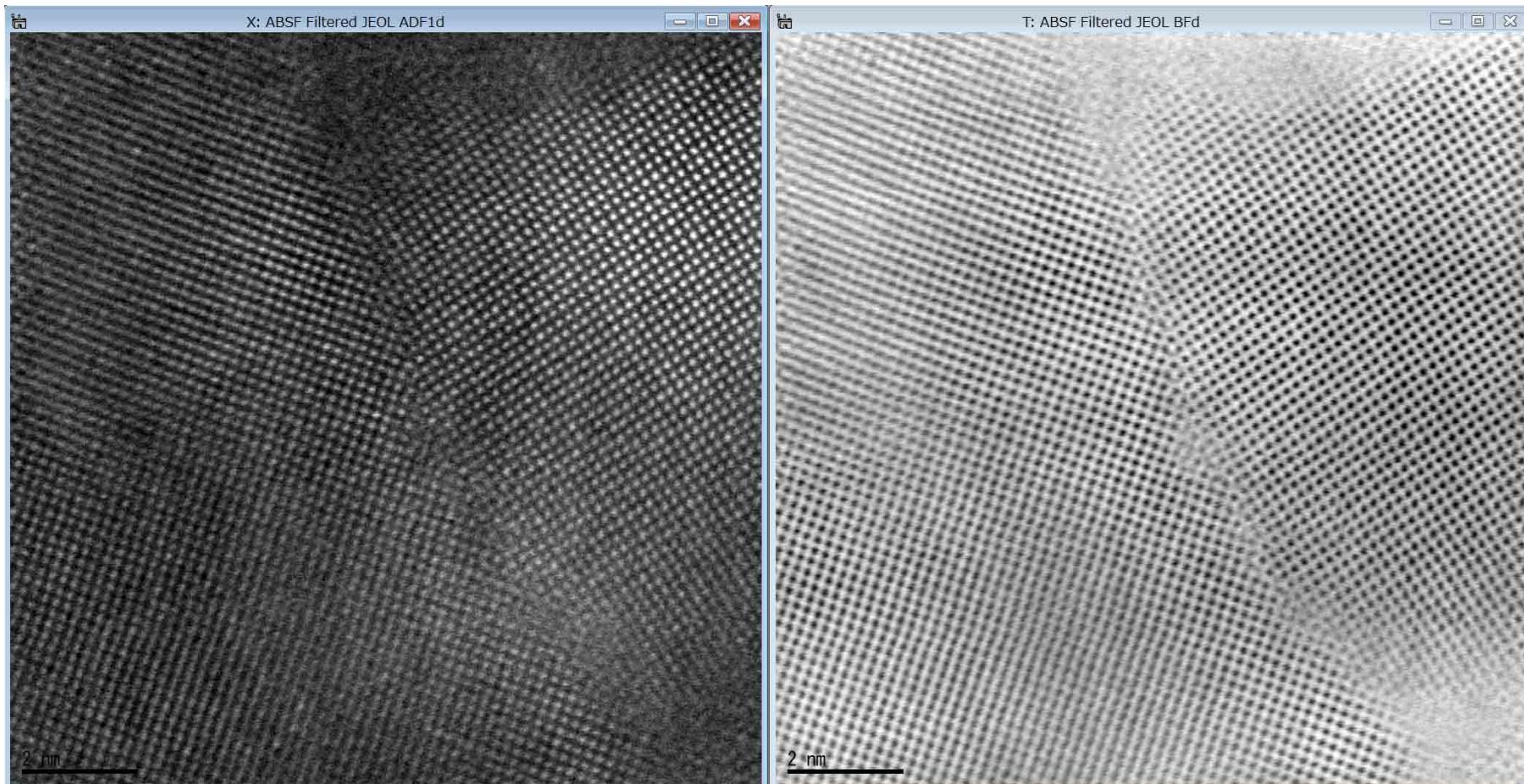
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



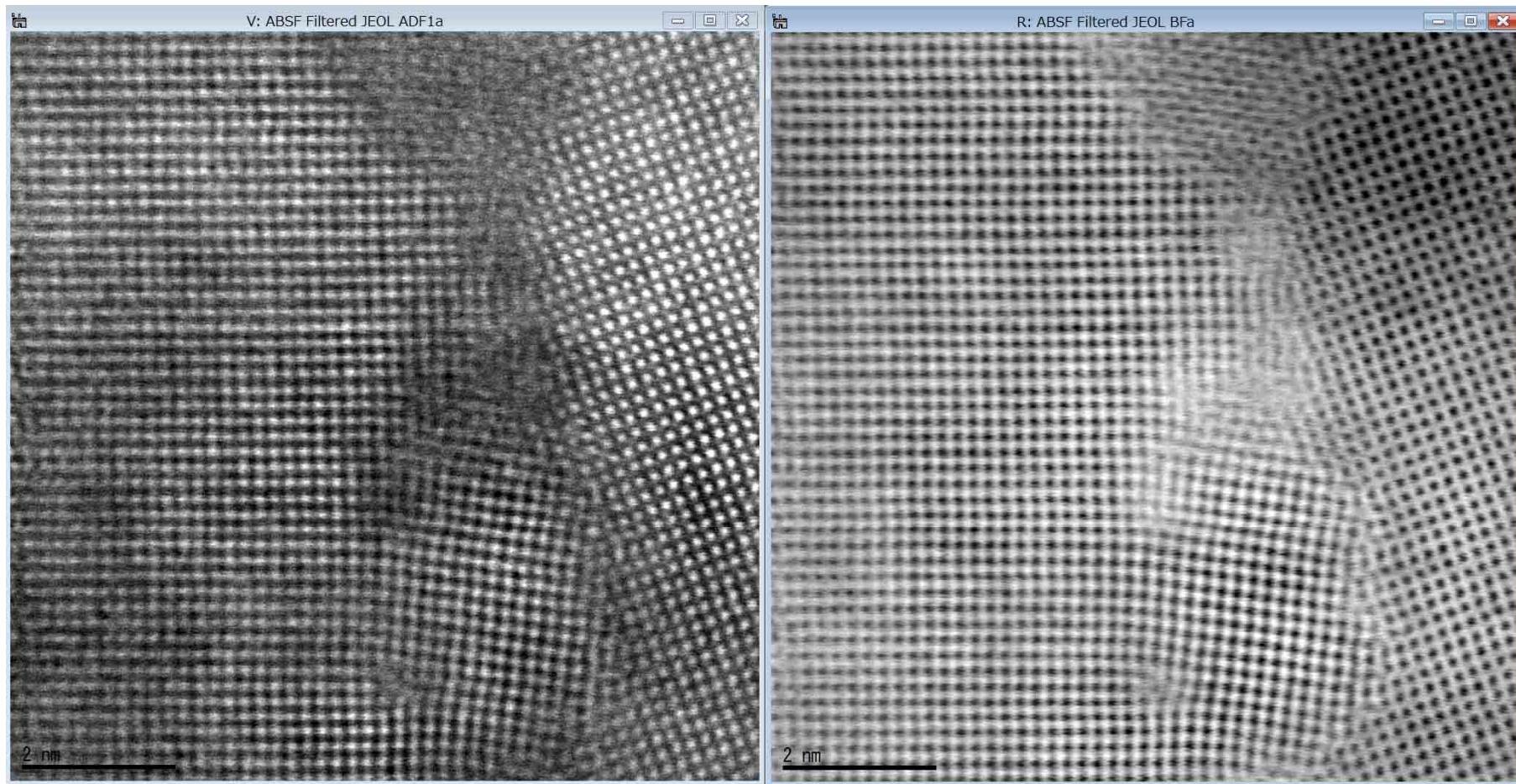
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



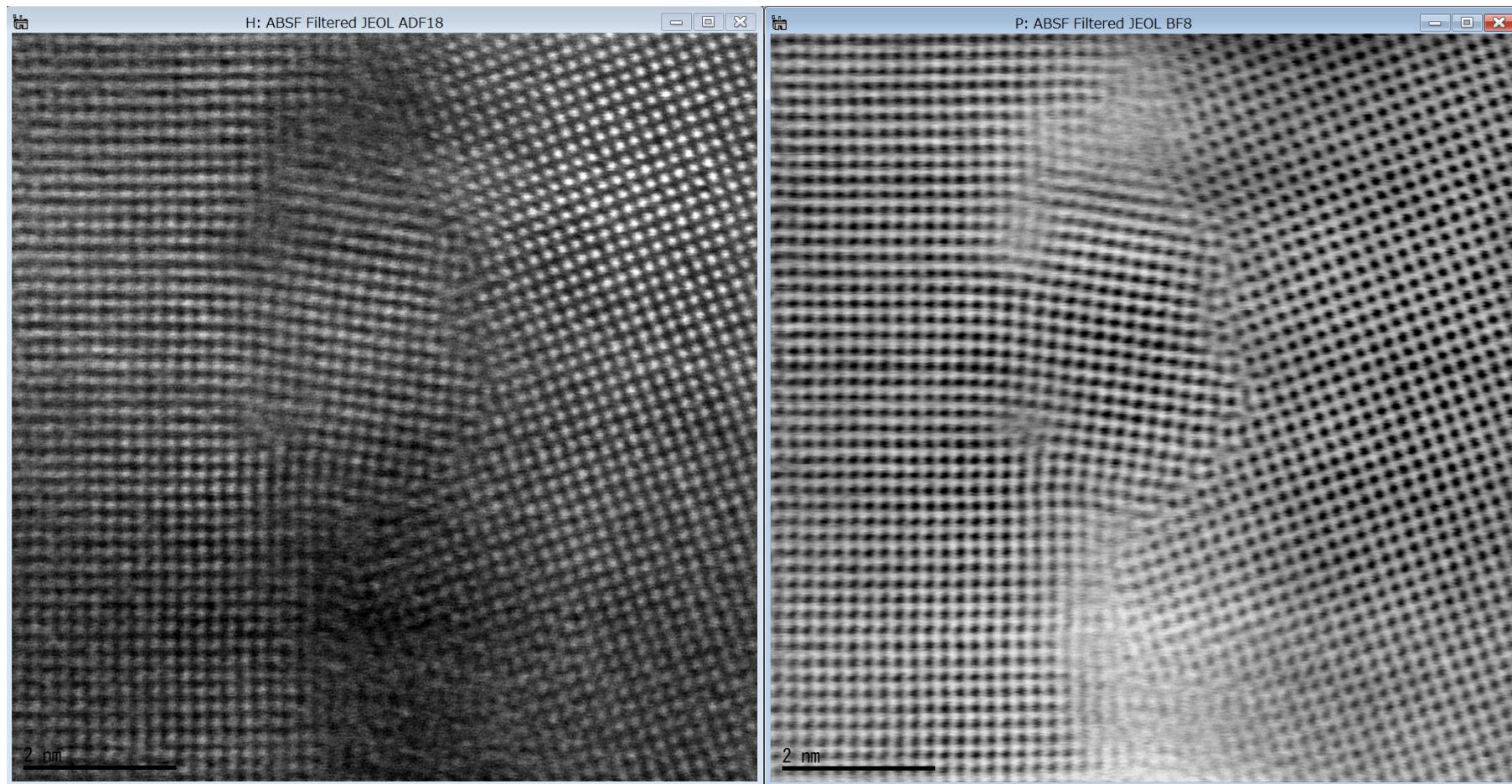
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



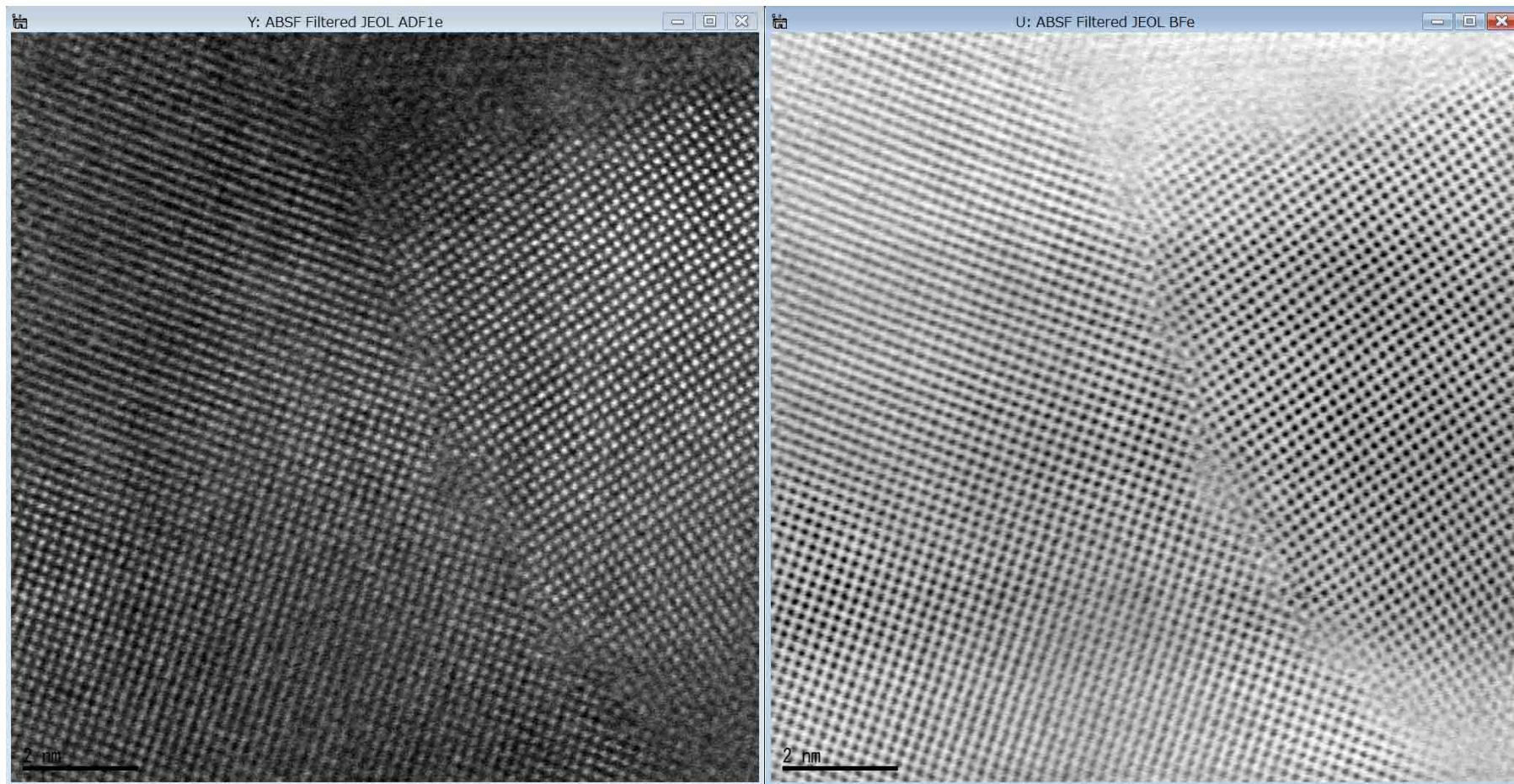
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



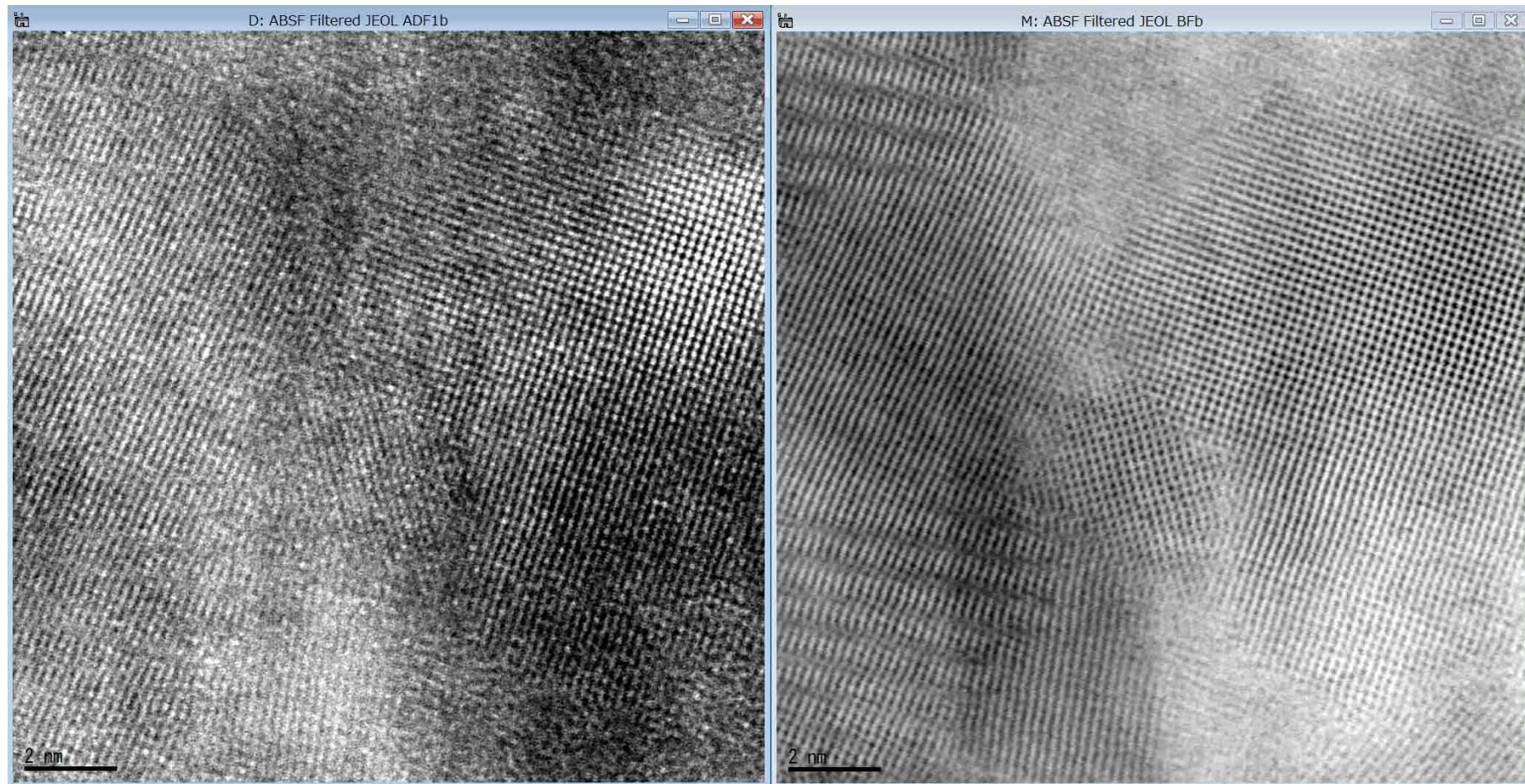
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



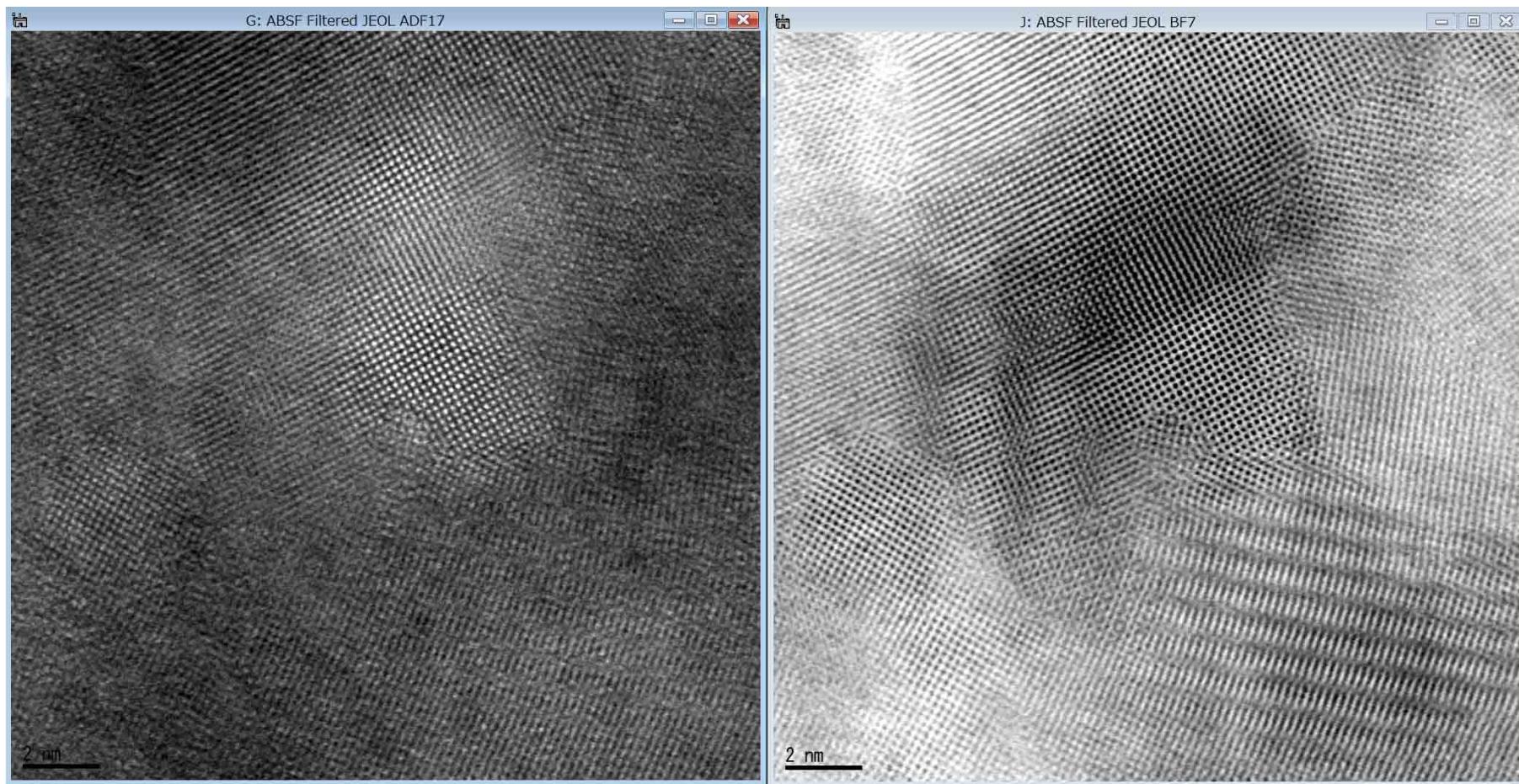
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



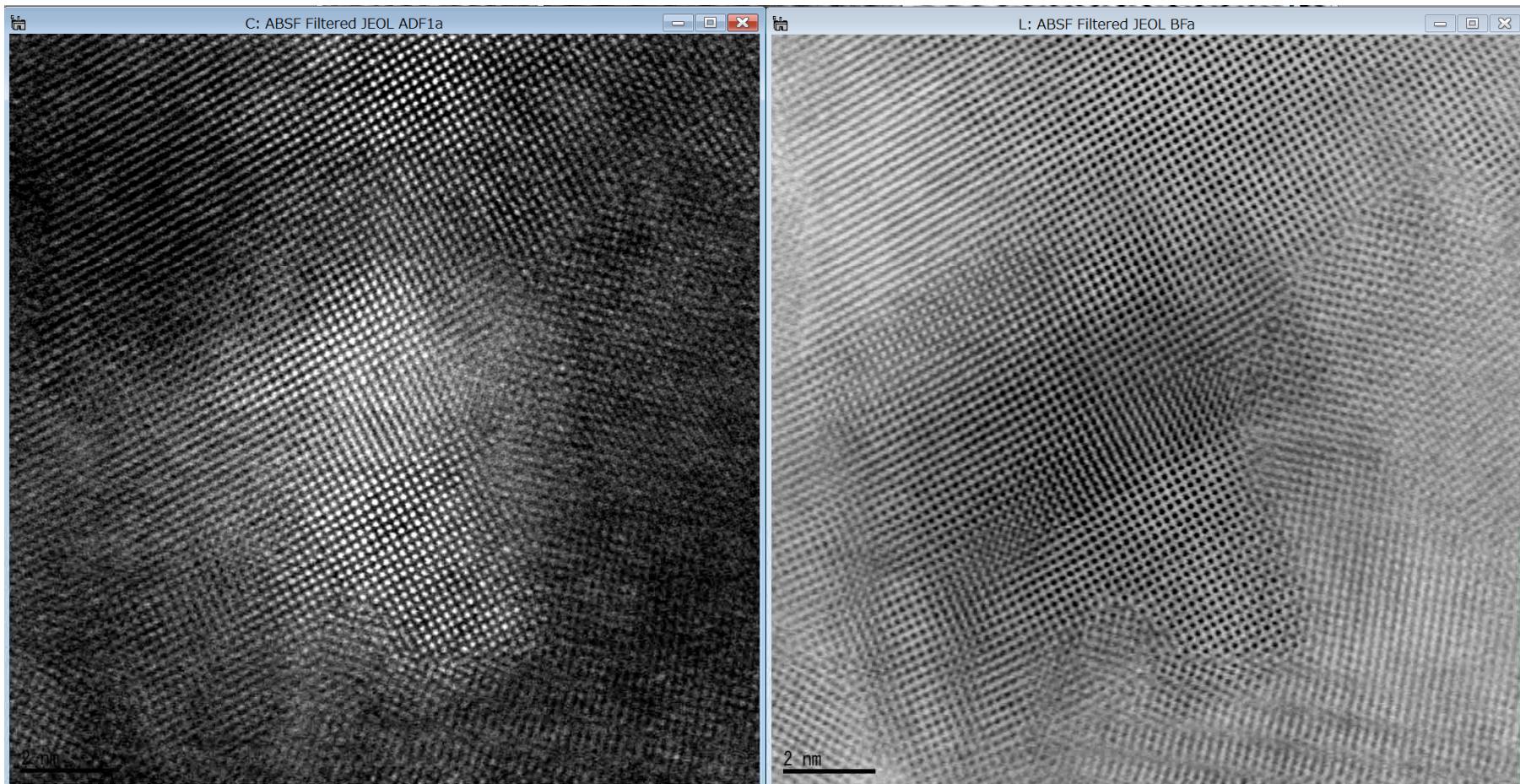
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



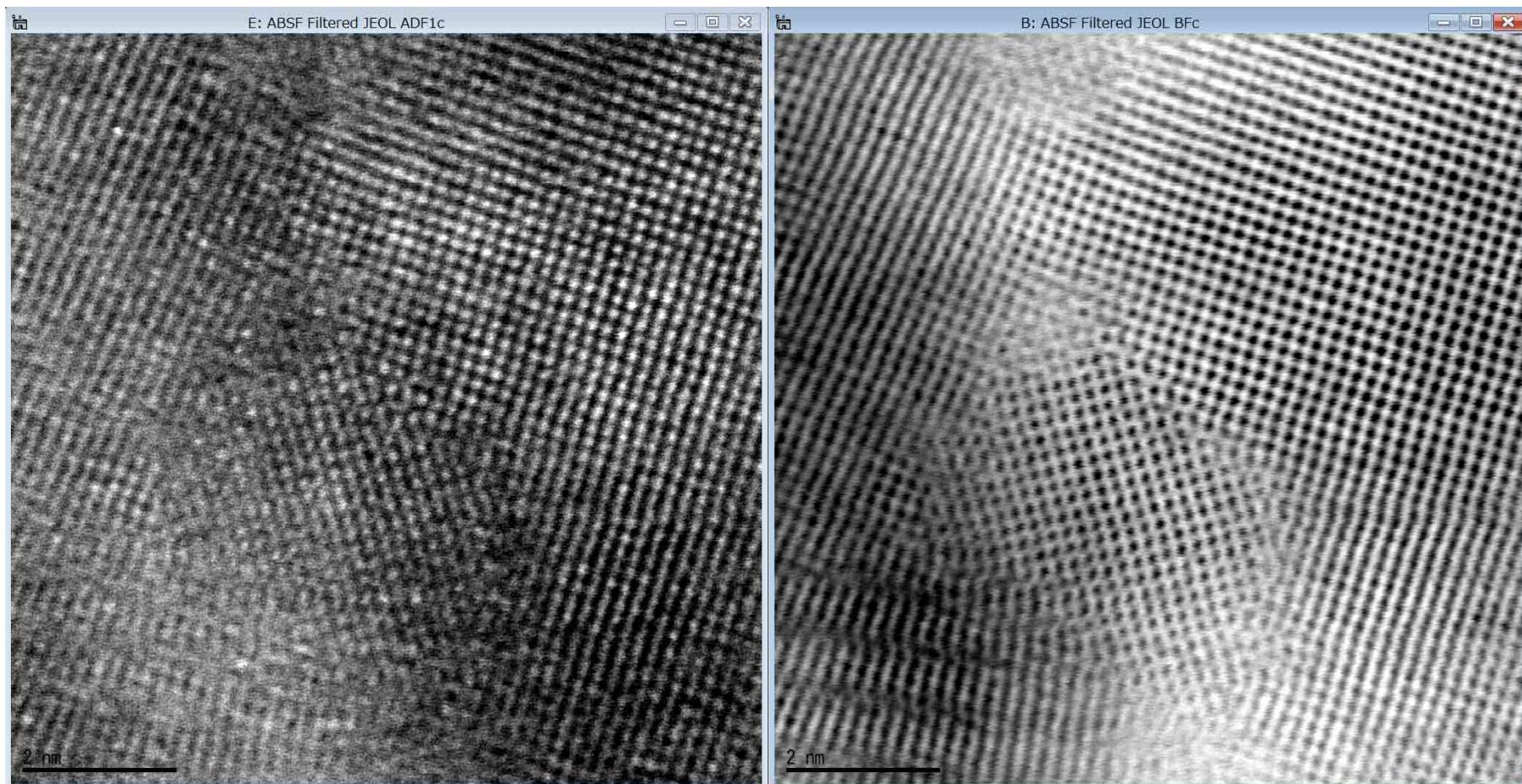
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



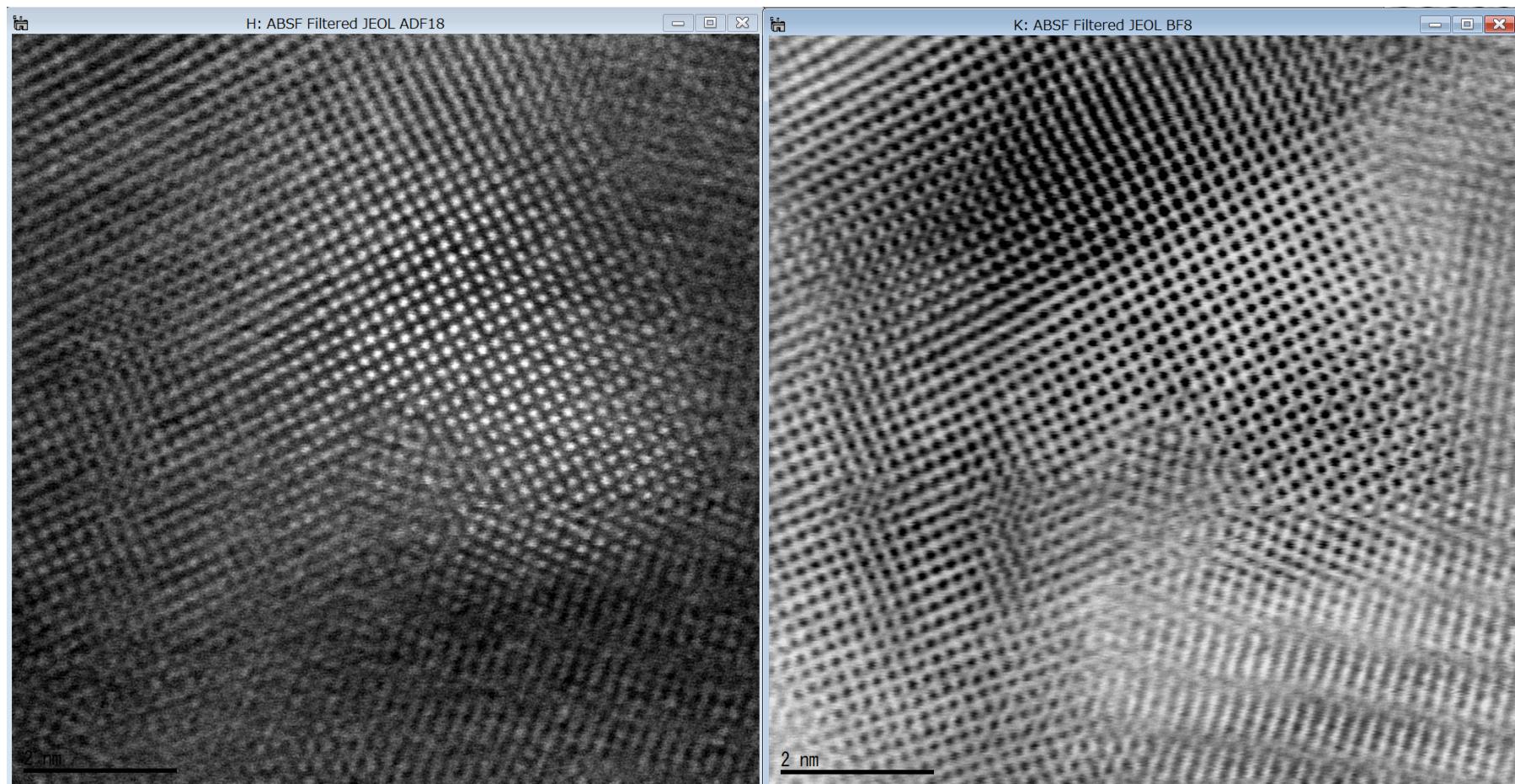
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



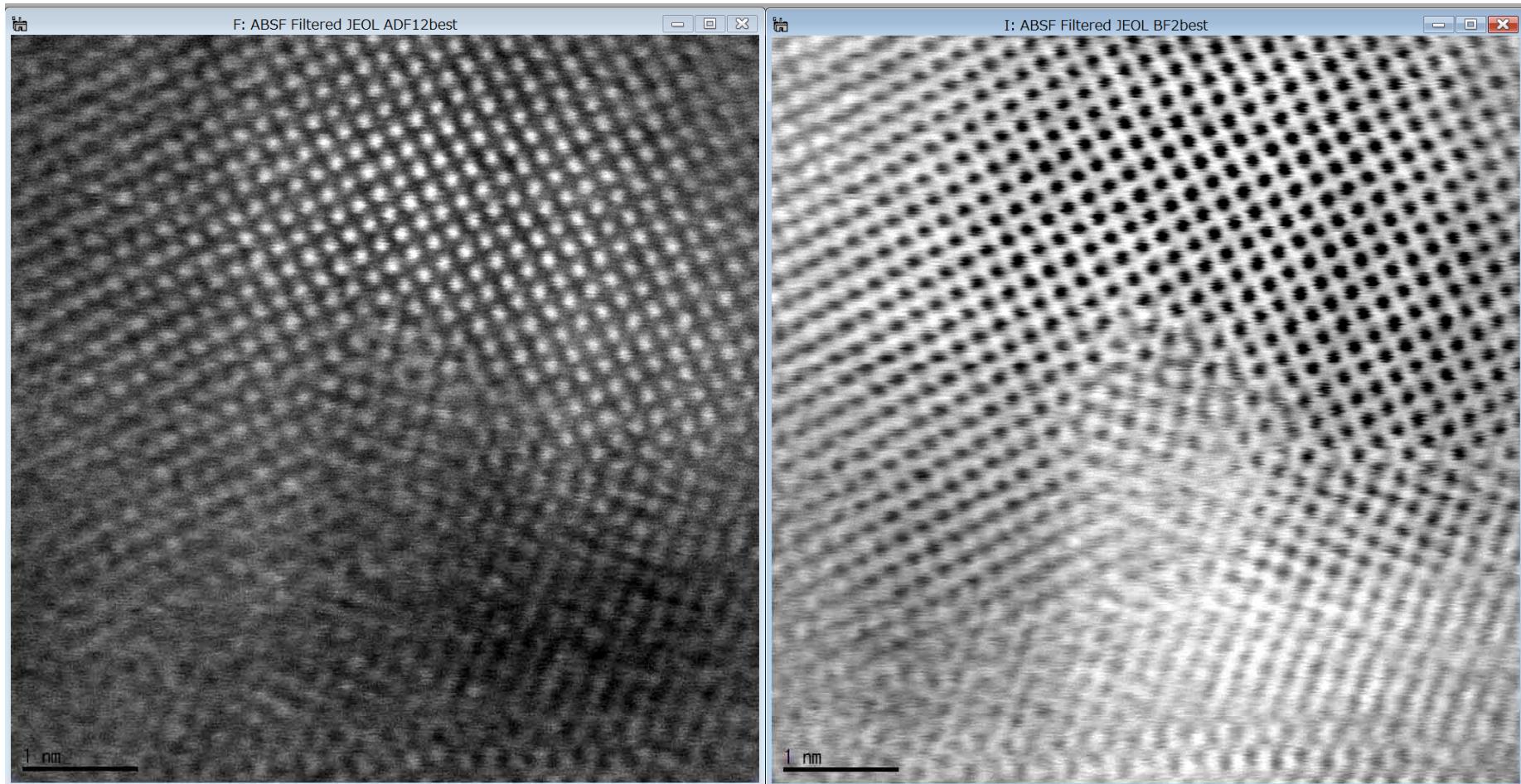
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



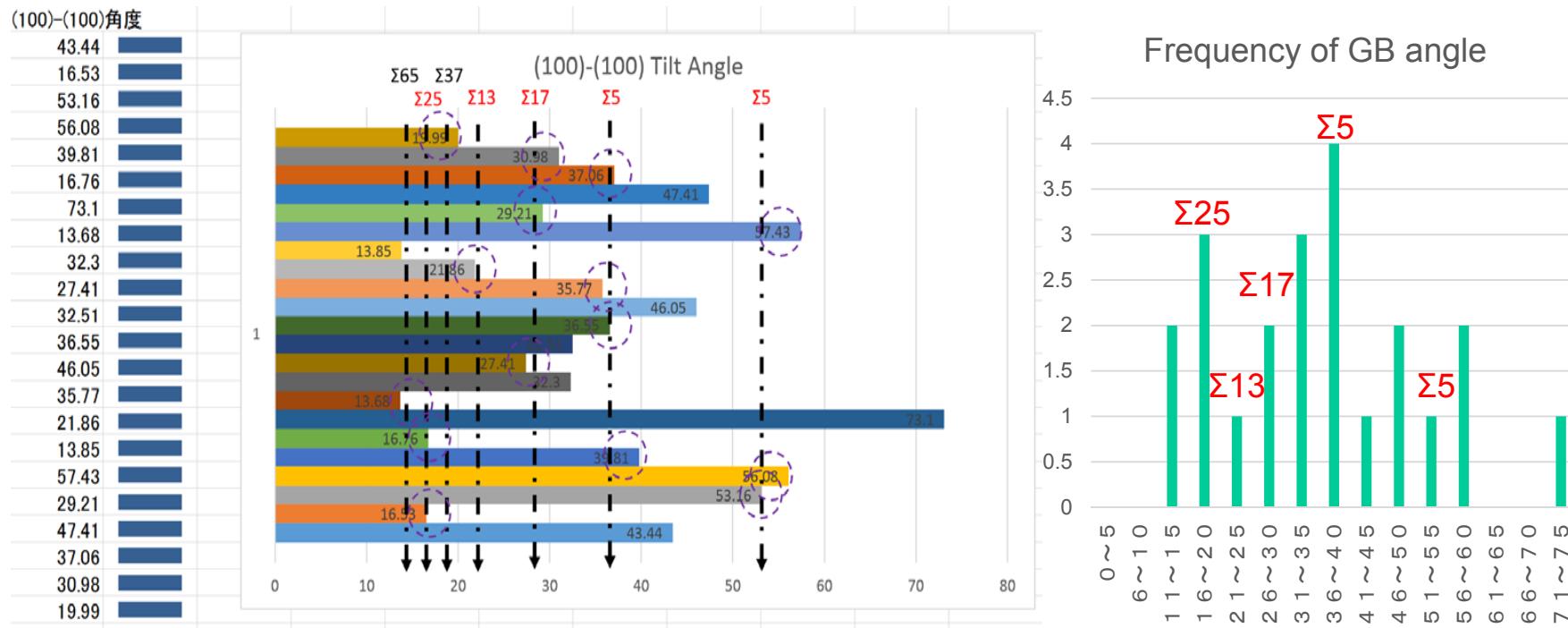
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



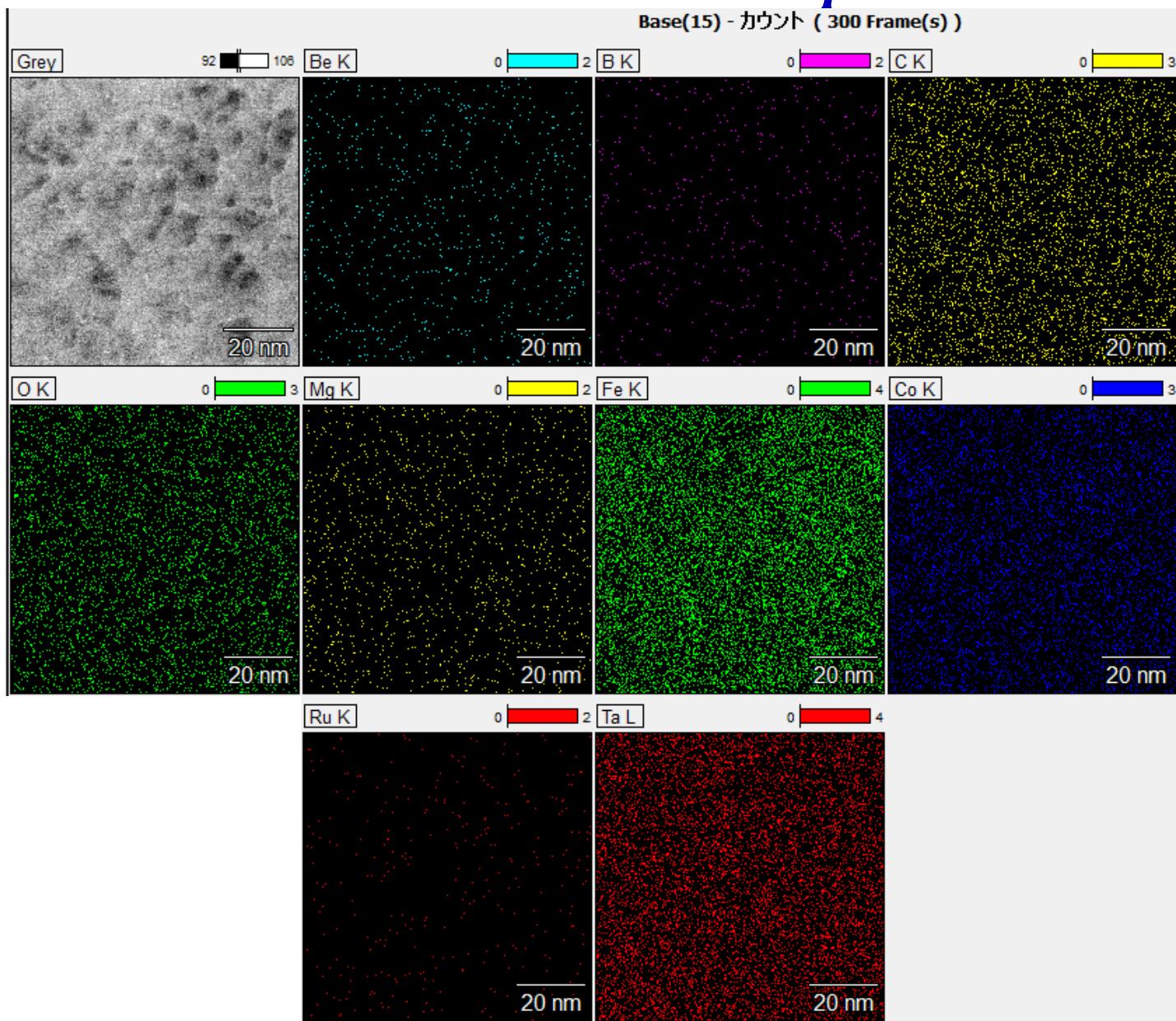
# *Planview sample 20nm MgO*

Sub./Ta5nm/Ru10nm/Ta5nm/FeCo5nm/**MgO20nm**/FeCo1nm



Sigma GBs OR are dominated.

# Planview Map



# Planview Map

