

Operación Remota de Instrumento Tecnológico Avanzado Microscopio Electrónico de Transmisión JEM2200FS

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Jeol Mexico



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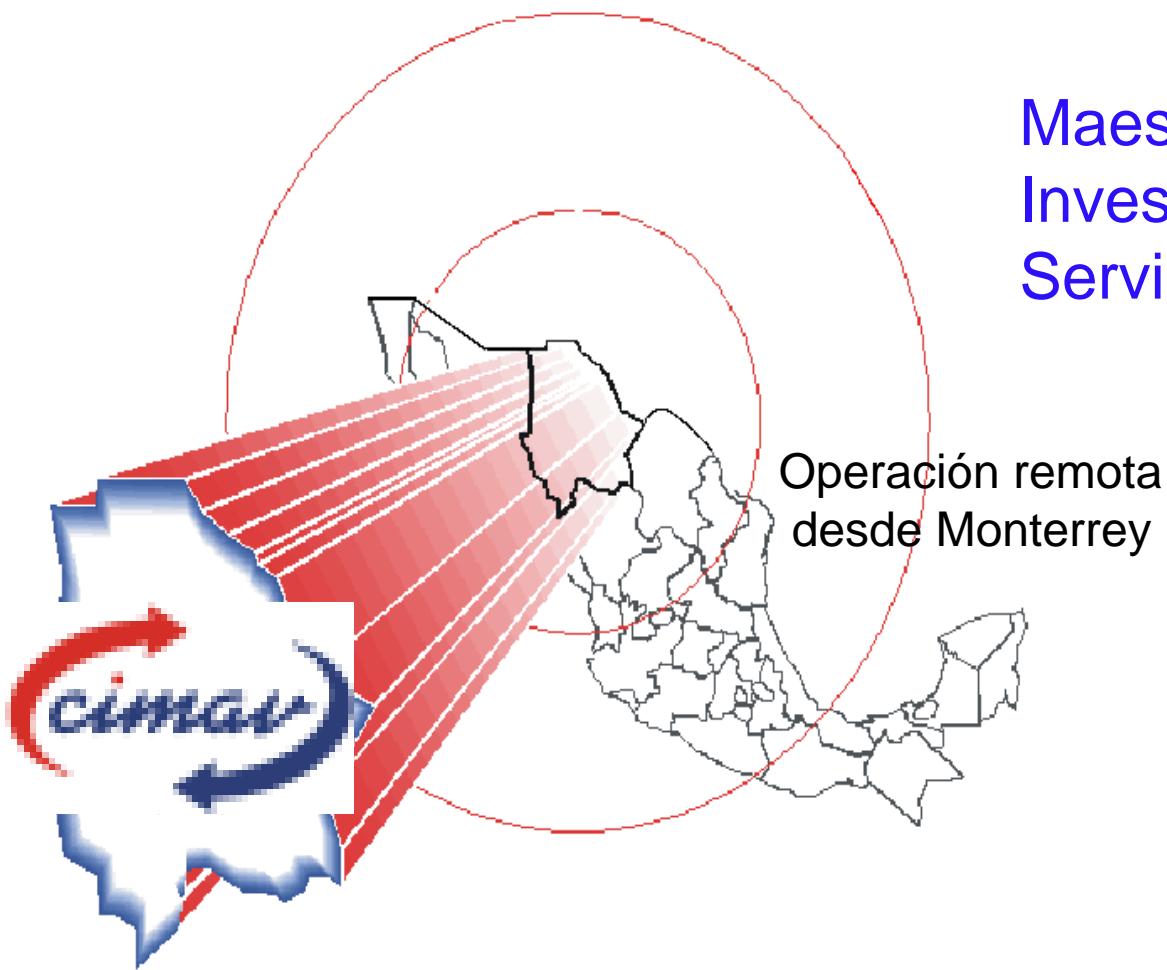
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telf 614 4391107

Chihuahua
Oct. 2012



Ubicación Geográfica

Centro de Investigación en Materiales Avanzados
CIMAV - Monterrey



Actividades

Maestría y Doctorado
Investigación

Servicio a la industria

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Unidad de control

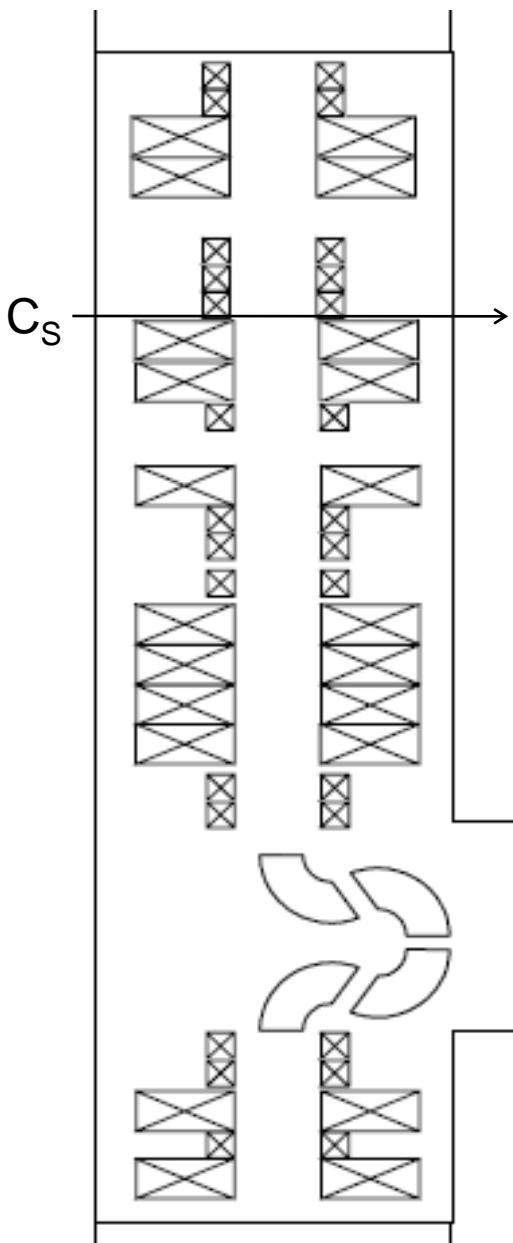


Columna + Tanque de alta tensión



Columna

Sección Transversal JEM2200FS



Operación Remota

- El Equipo es Controlado Totalmente por Computadora
- Pueden Acceder Muchos Centros de Investigación.
- Colaboración Con Especialistas en Diferentes Áreas
- Mantenimiento y Alineación Remota
- Uso las 24 hr.
- Disminución de Costos



Para que sirve el equipo?

- Ciencia Básica
 - Generación de Nuevos Materiales
 - Optimización de Materiales Existentes
-
- Nanotecnología
 - Ciencia de Materiales
 - Alta Utilidad para Centros de Investigación Científica

CdSe QD en polystyrene latex

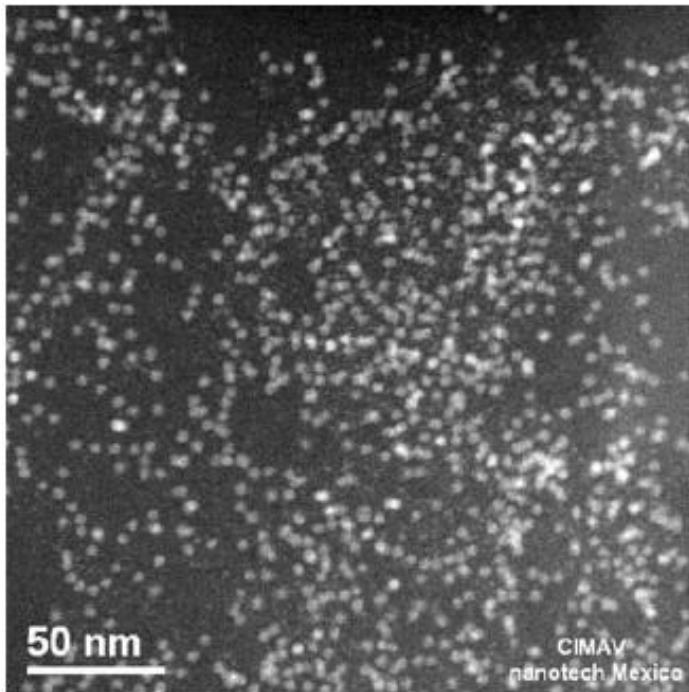


Fig. 6 HRTEM micrograph of CdSe quantum dots

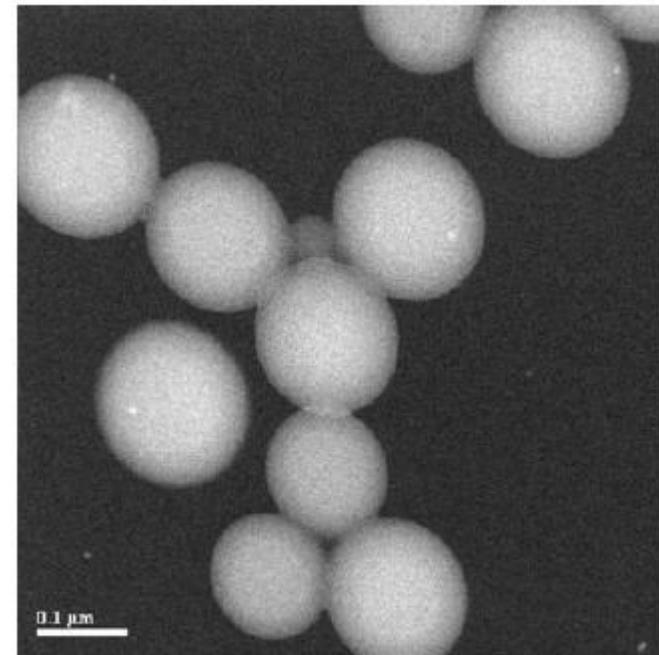
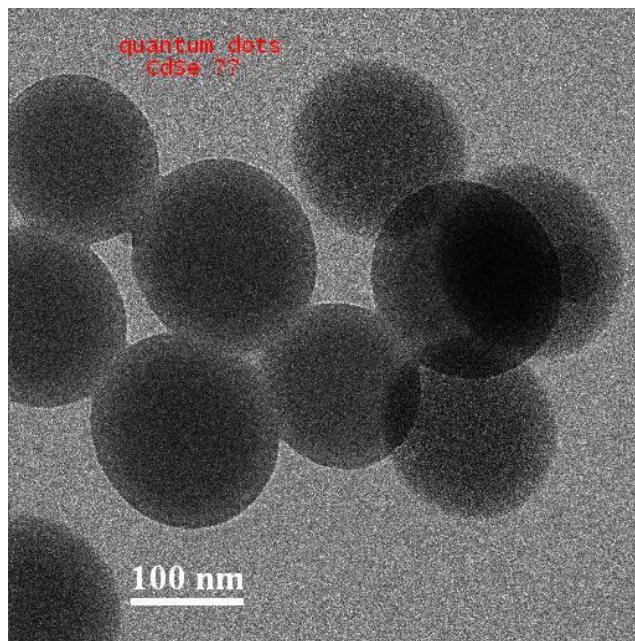


Fig. 7 HRTEM micrograph of CdSe quantum dots / polystyrene composite

Anilú Rubio-Ríos et.al., J Polym Res (2012) 19:9833
DOI 10.1007/s10965-012-9833-5

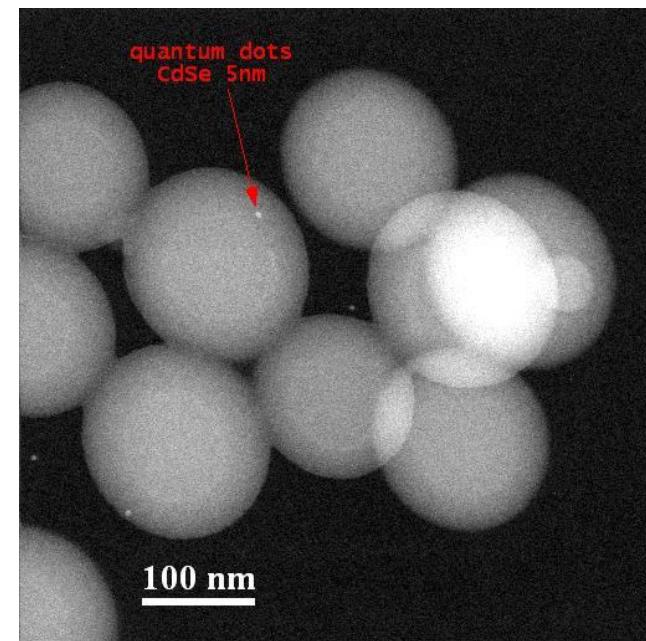
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Quantum Dots



Campo Claro

JEM 2200FS Cs corregido

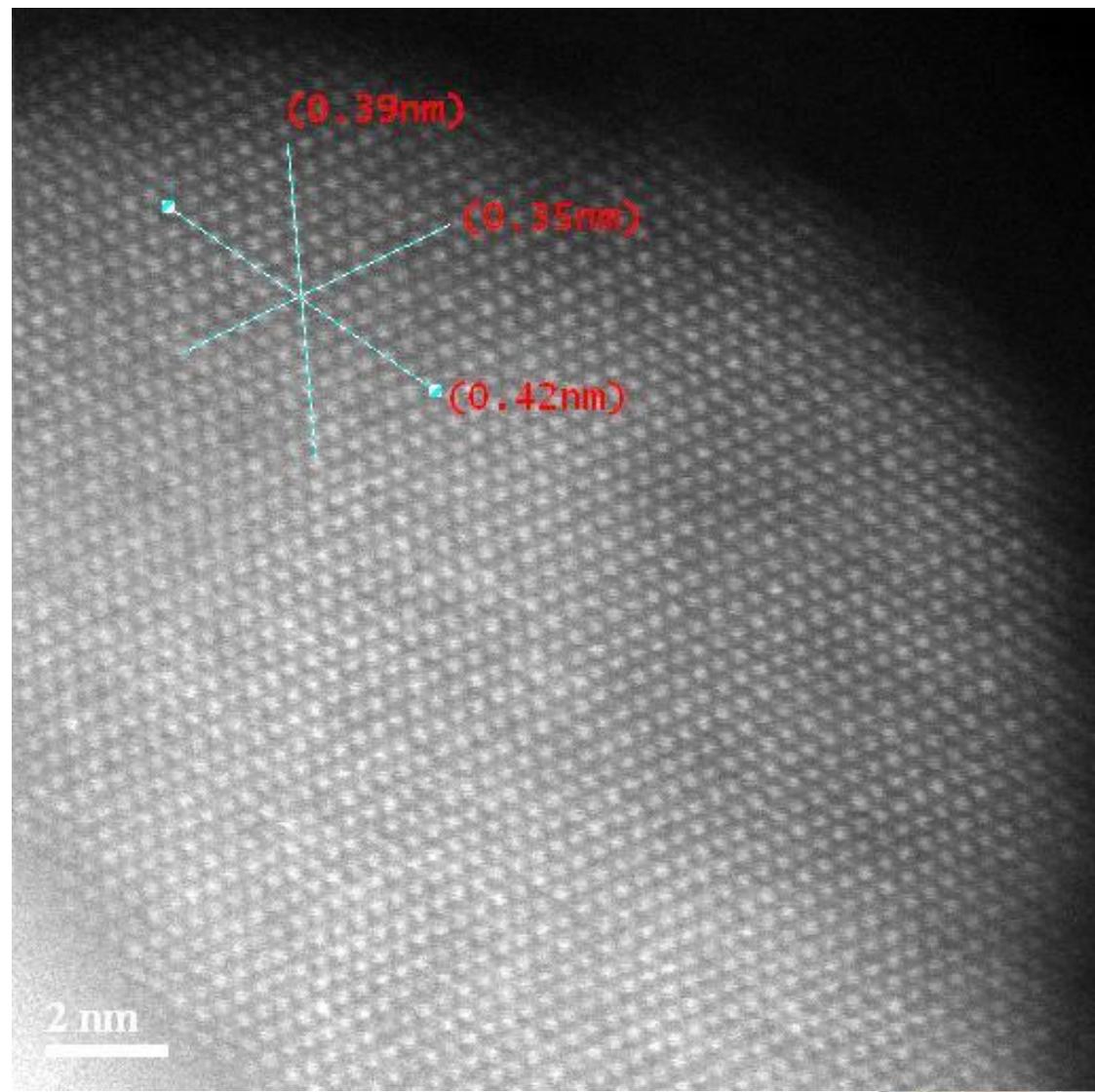
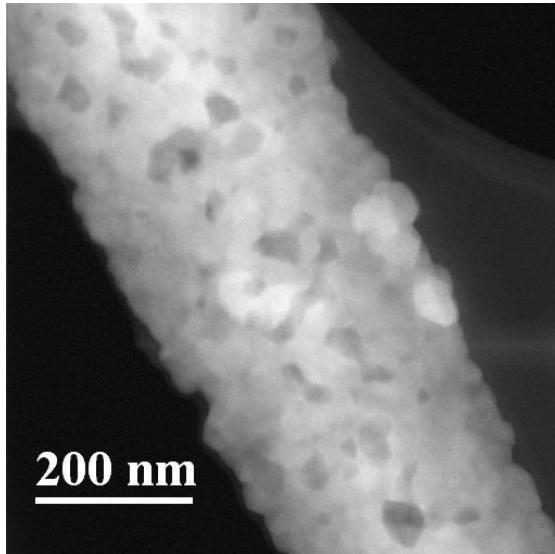
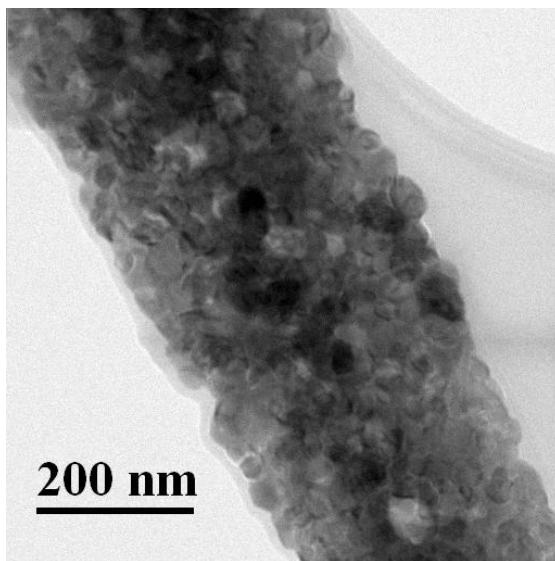


HAADF

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Catalizador de Zr, La y Ce



CoFe₂O₄

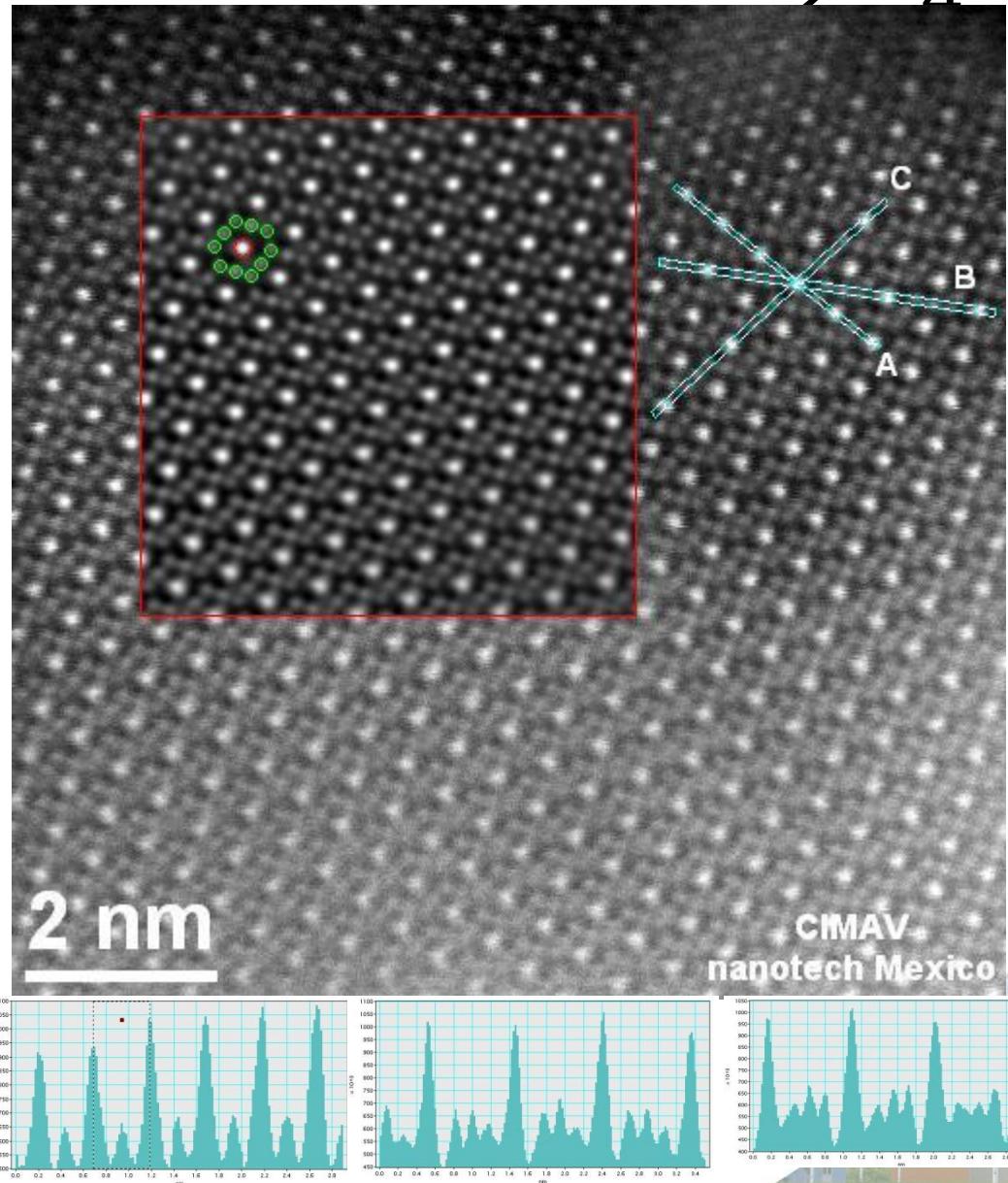
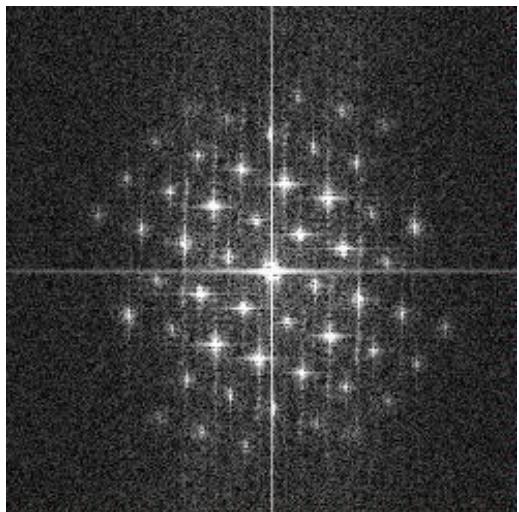
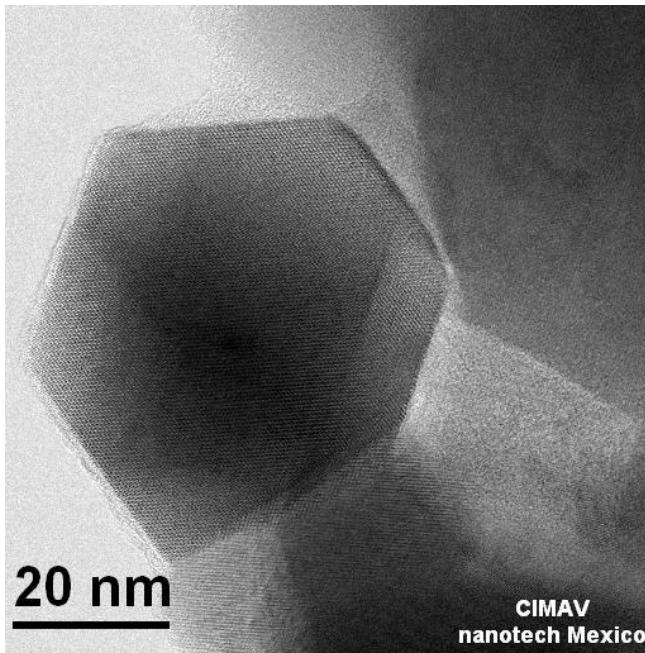
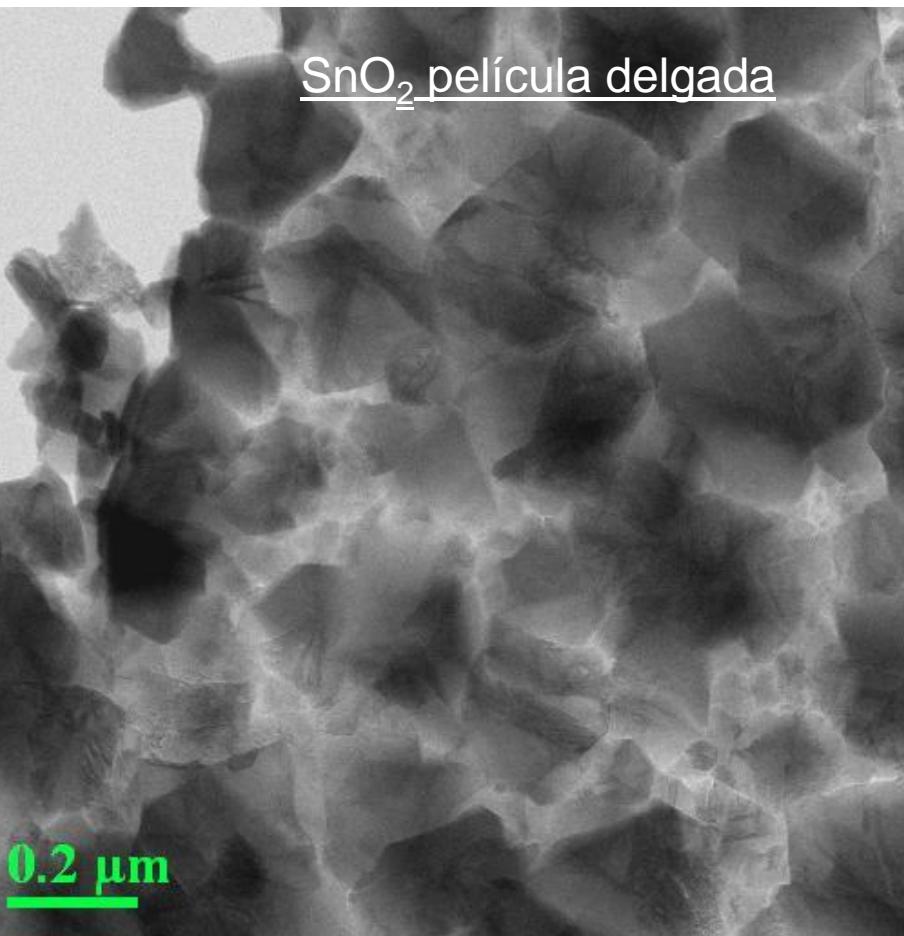


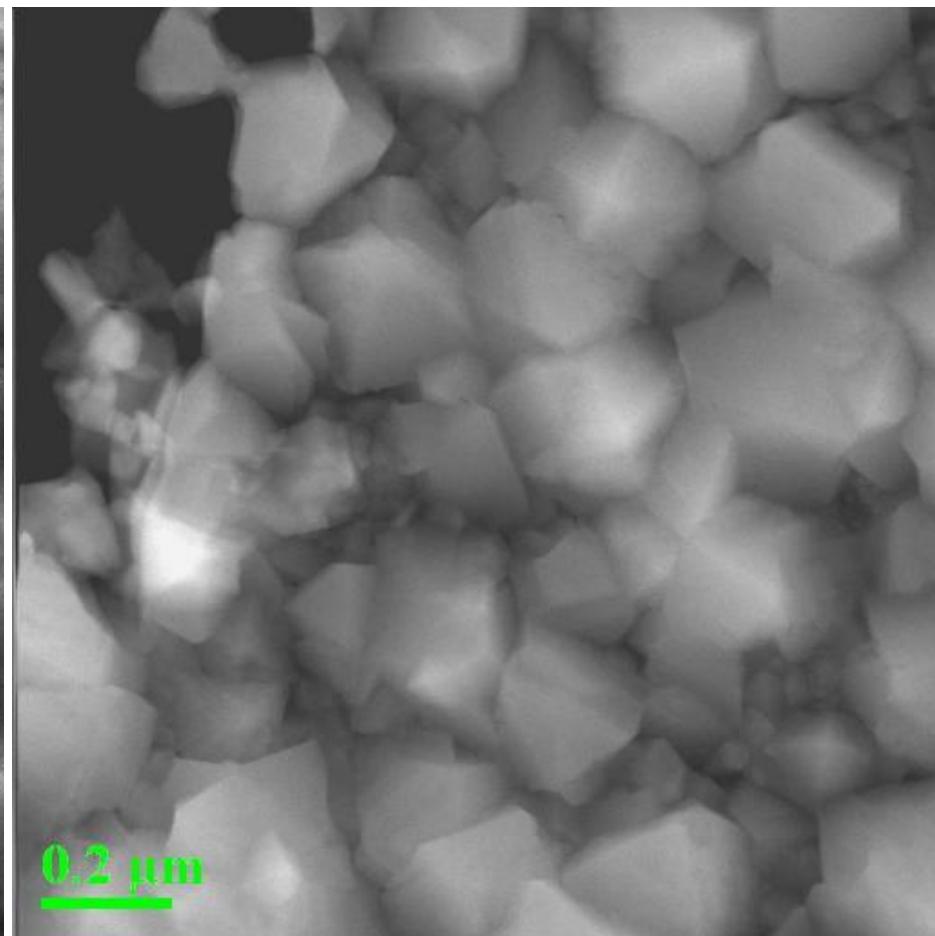
Imagen en STEM

Como es la geometría de los granos?

SnO₂ película delgada



Campo Claro

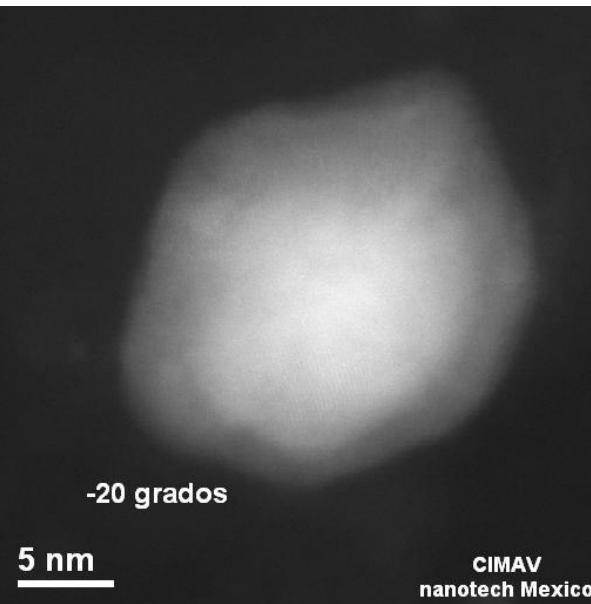
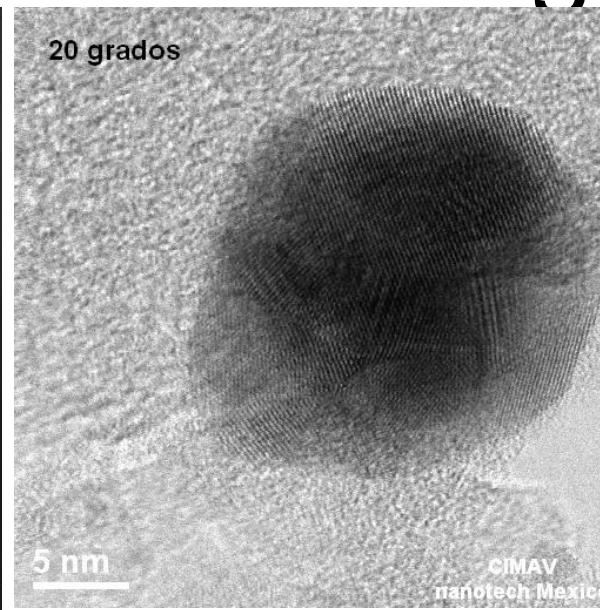
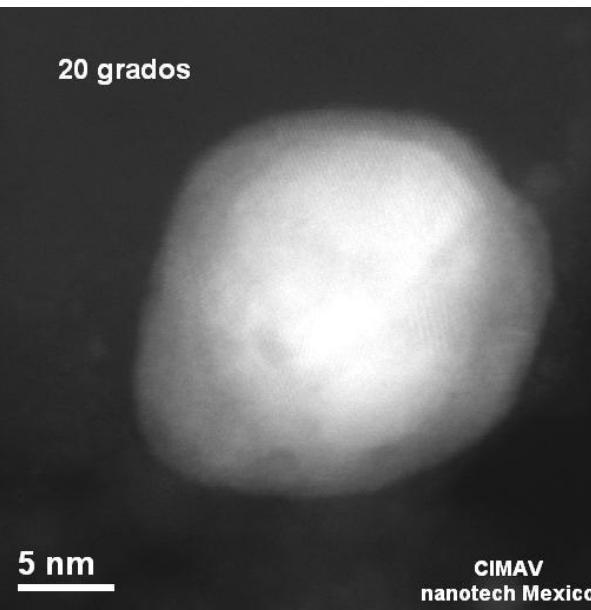


HAADF

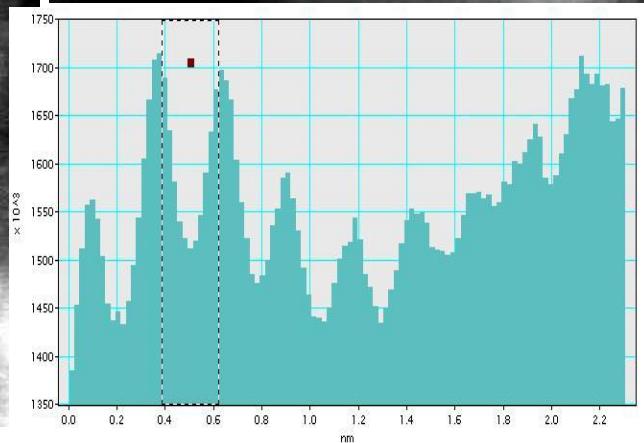
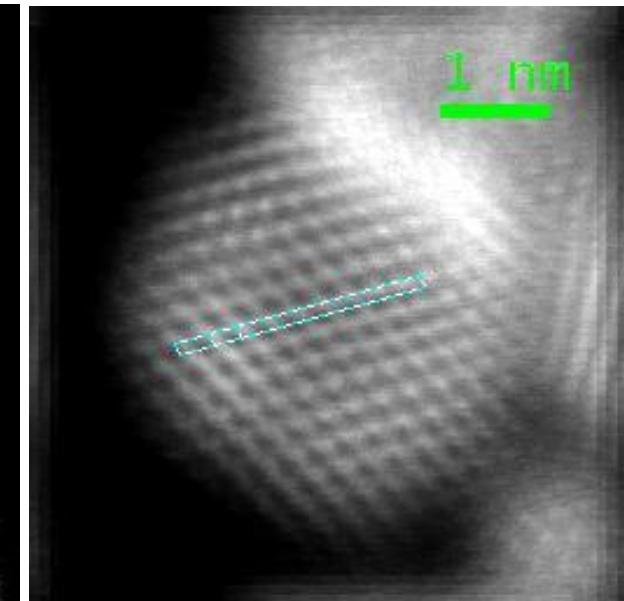
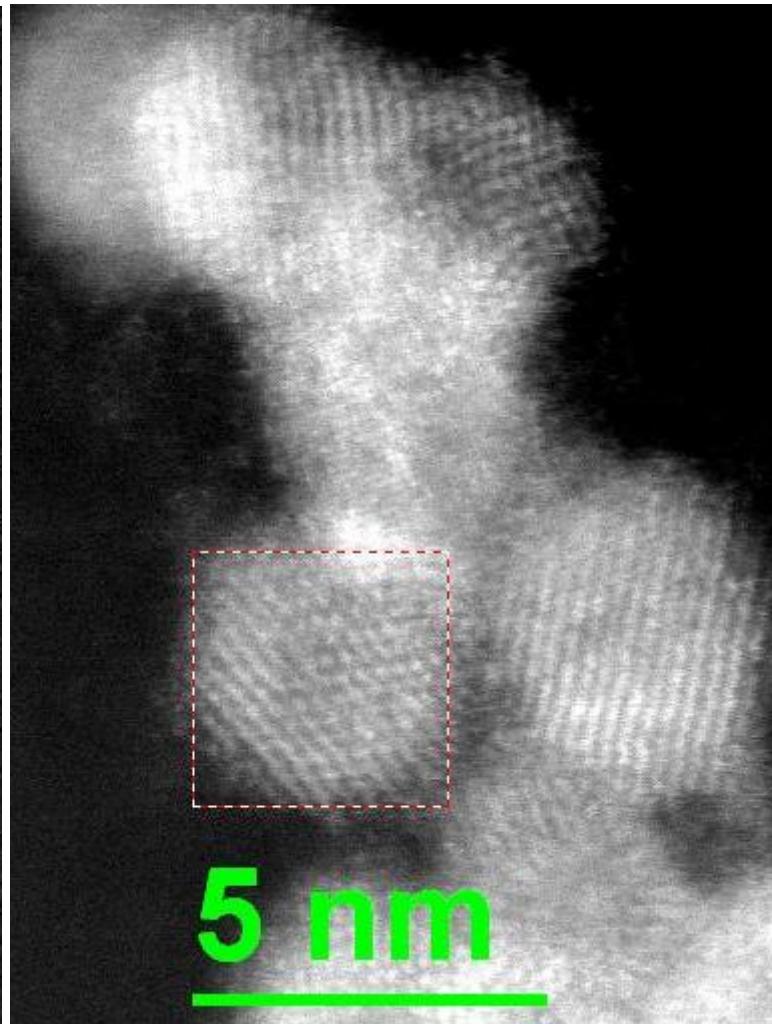
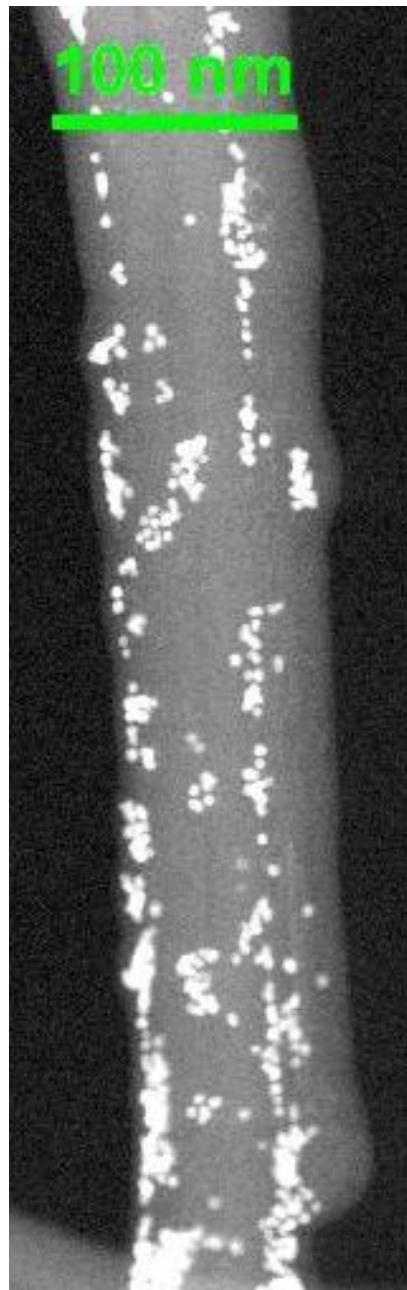
JEM 2200FS Cs Corregido



Core-Shell Au-Ag



HREM en STEM con HAADF

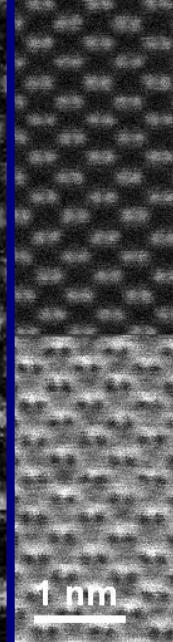
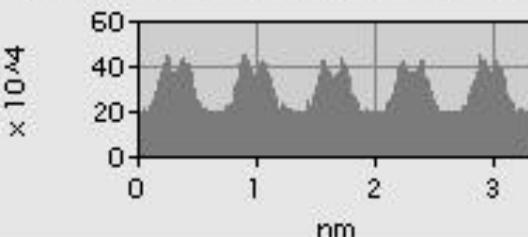
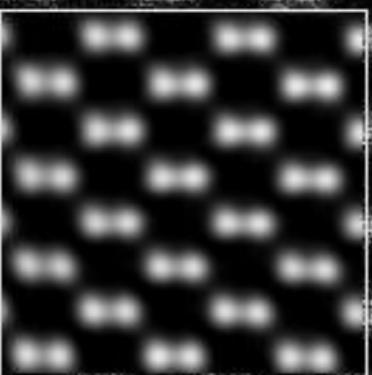


Pt-Ru sobre Nanotubos de C

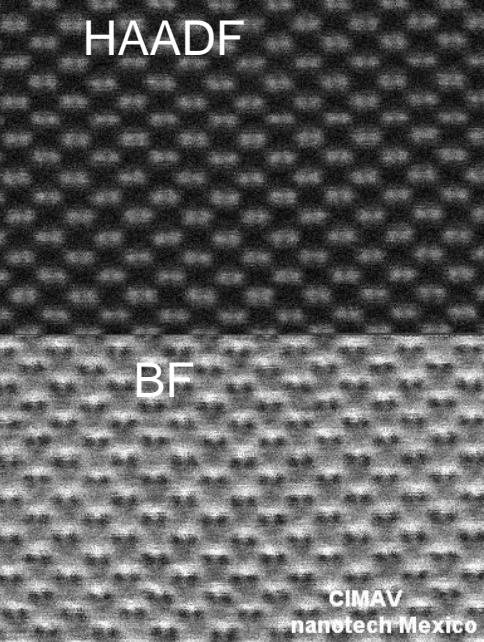


Silicio [110]

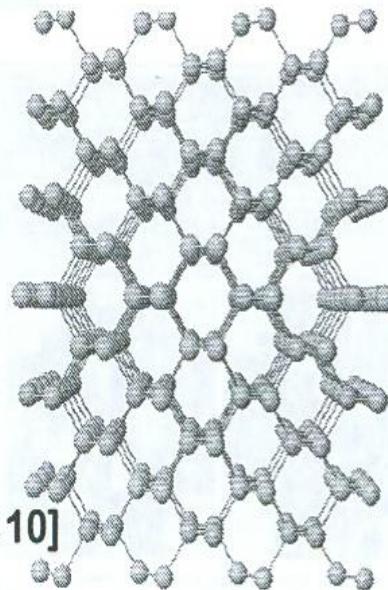
1 nm



BF

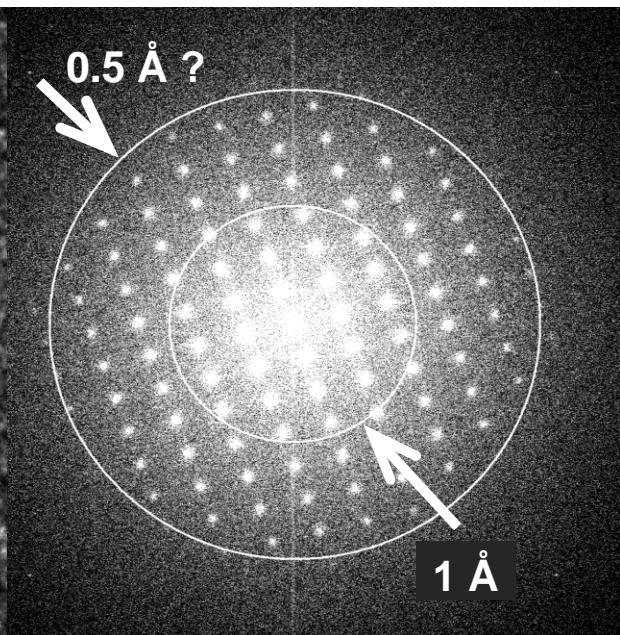
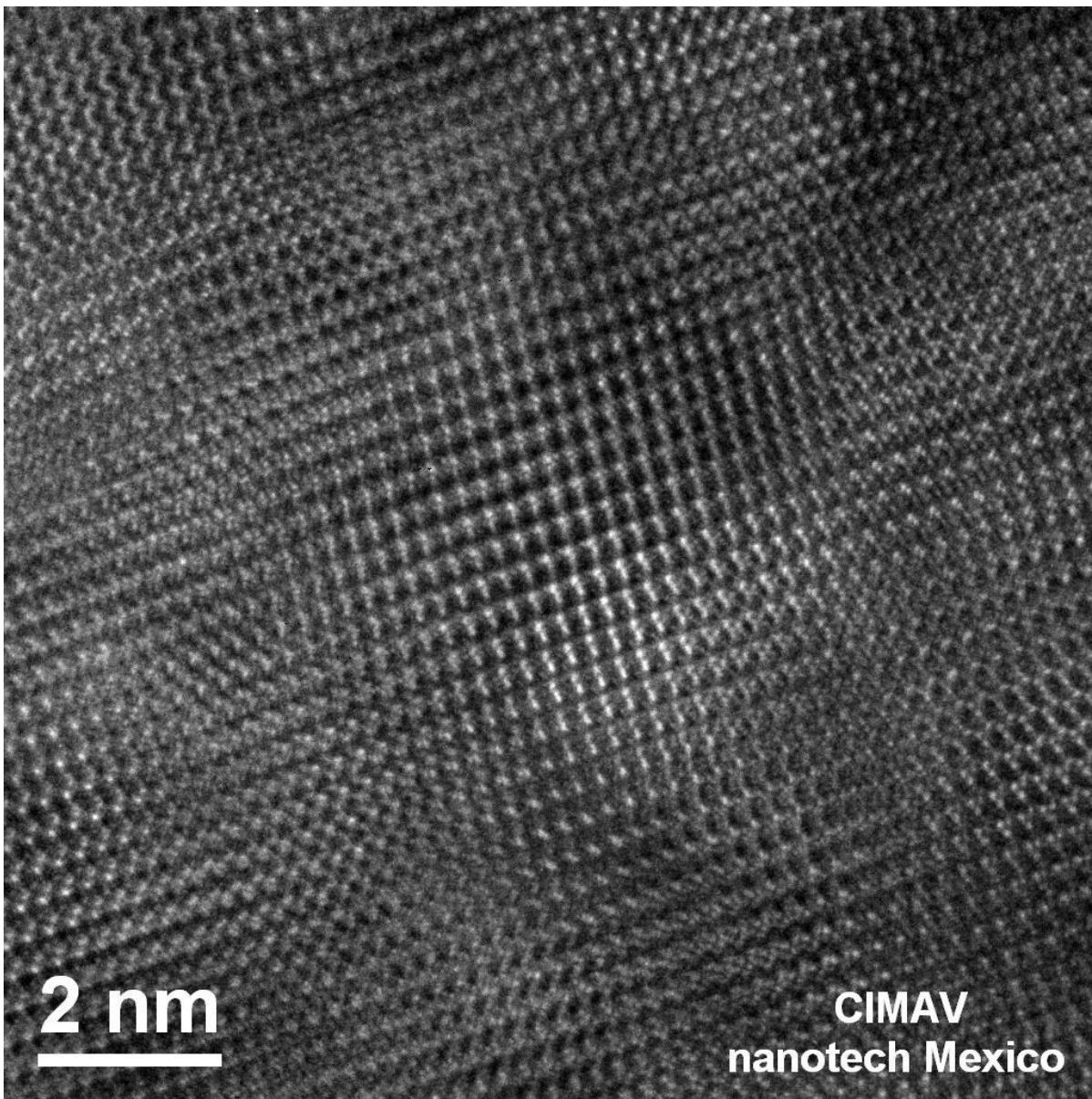


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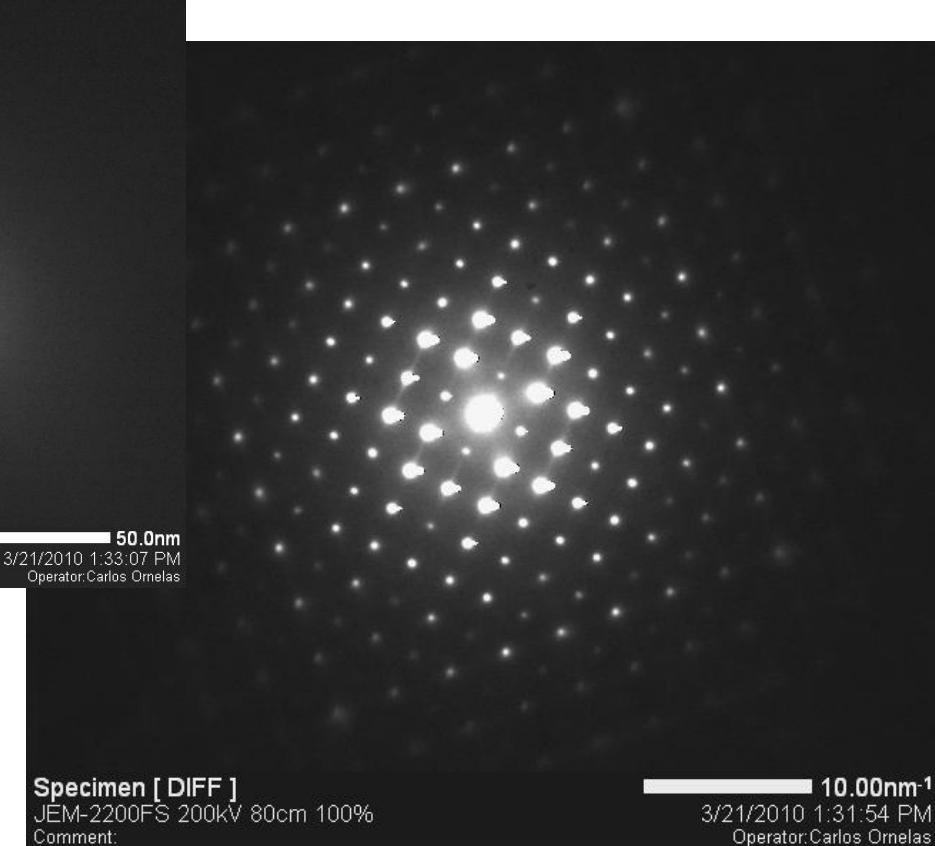
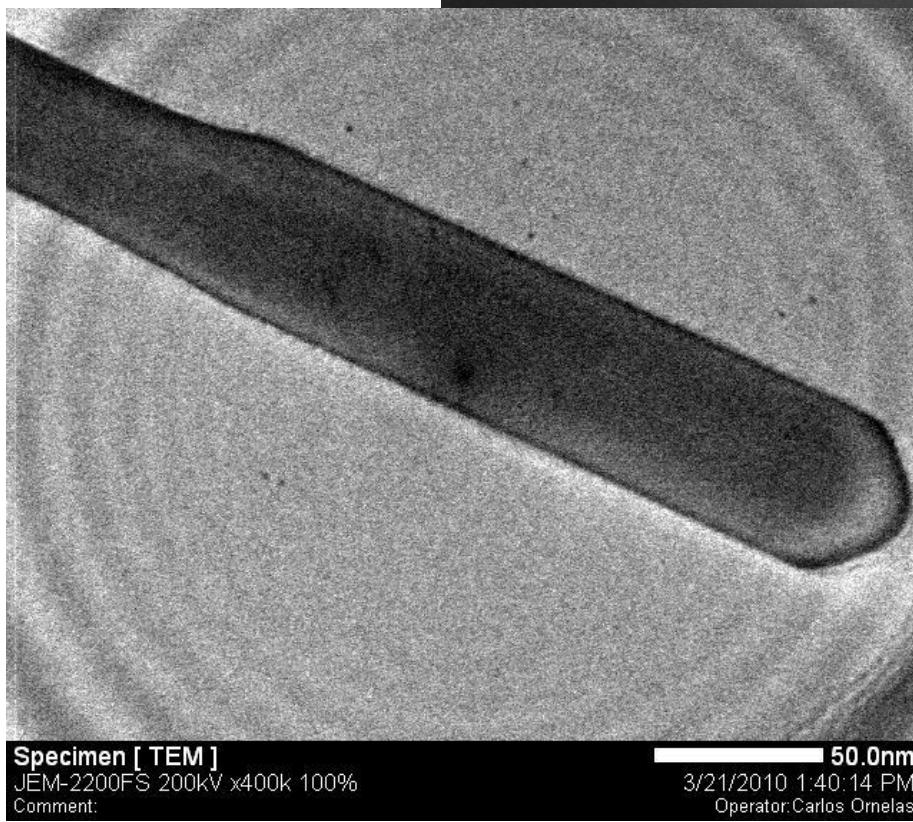
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Zafiro

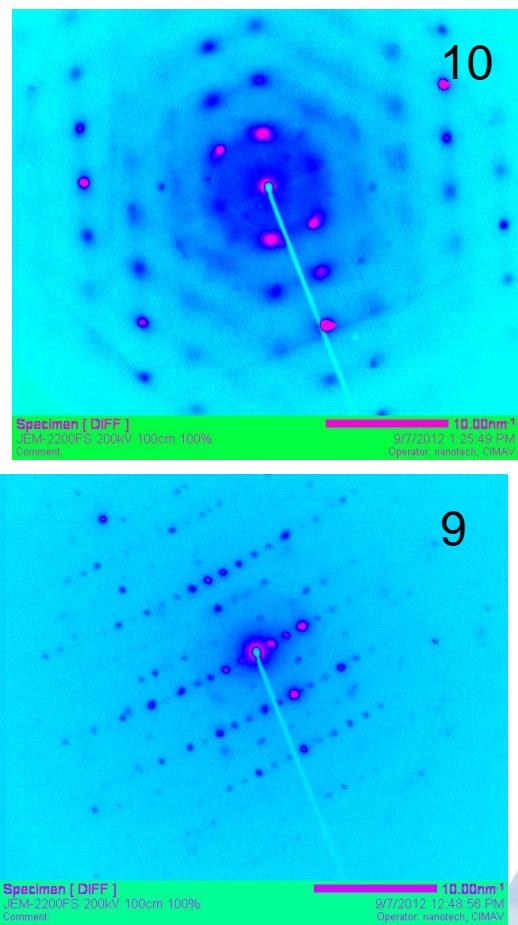
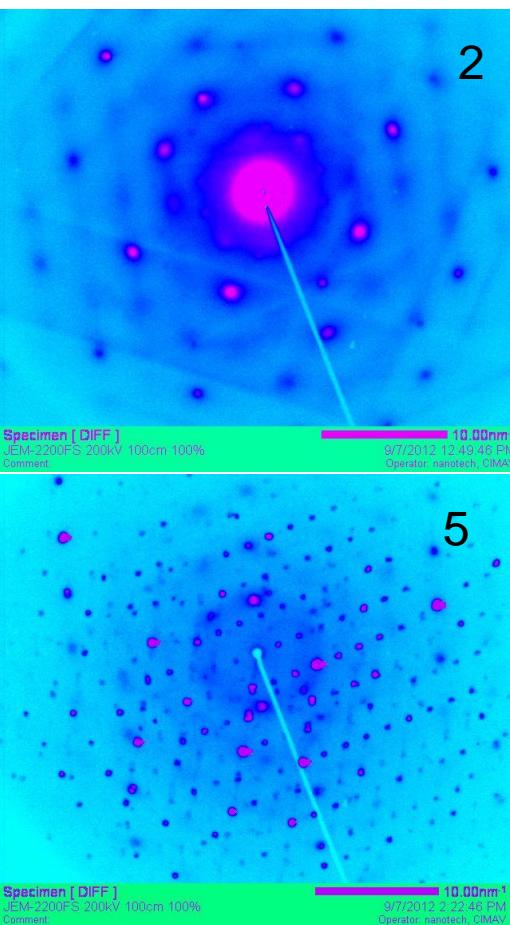
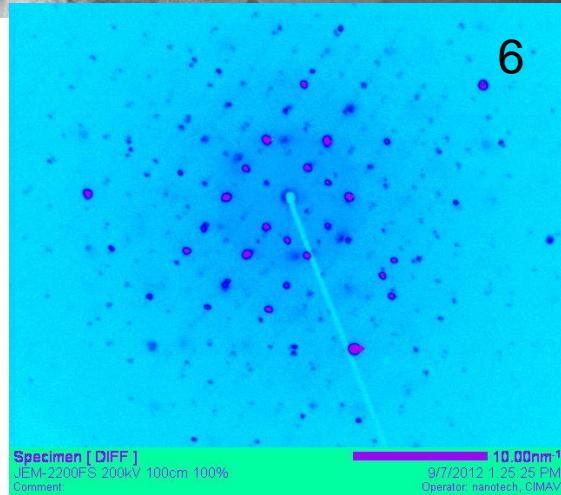
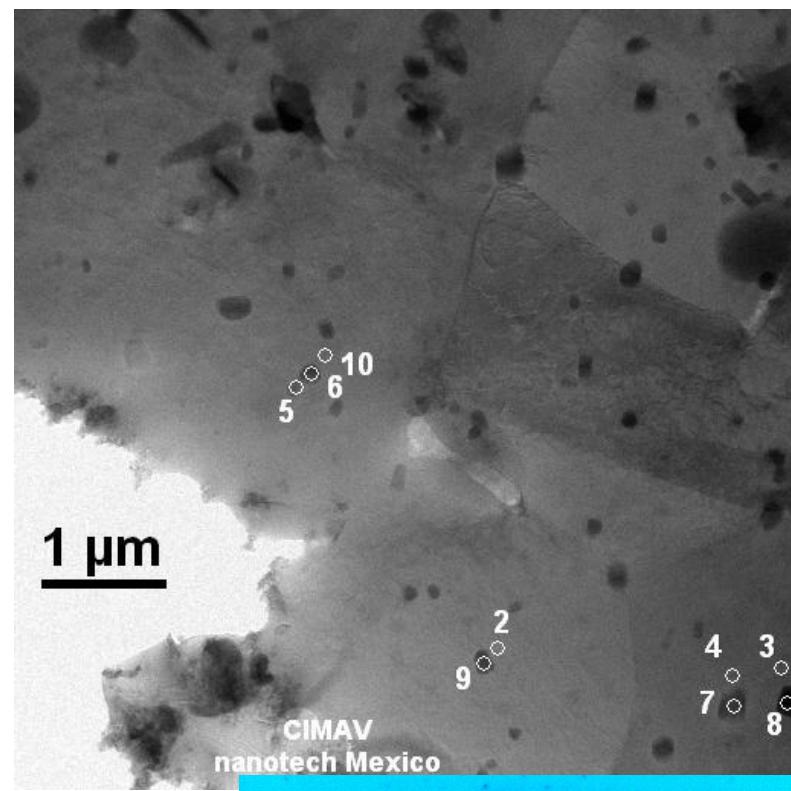


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NBD SnO₂-cinta



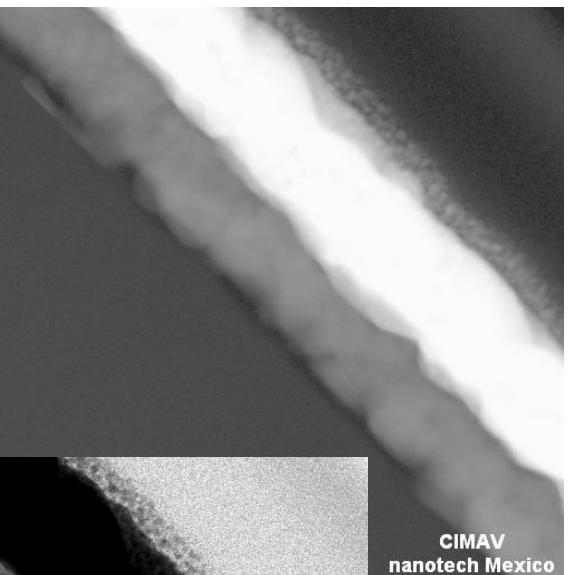
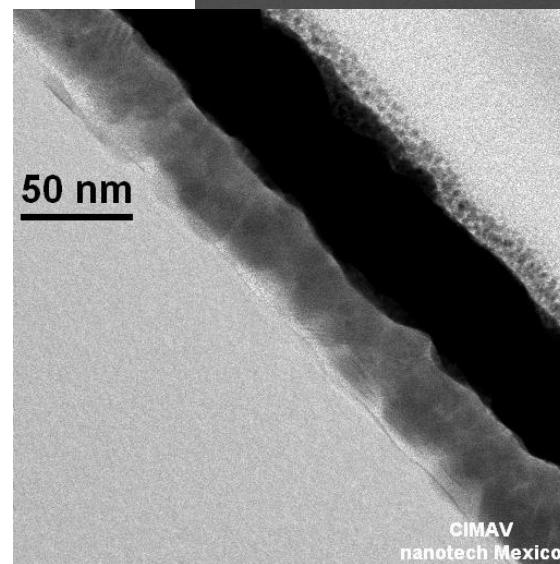
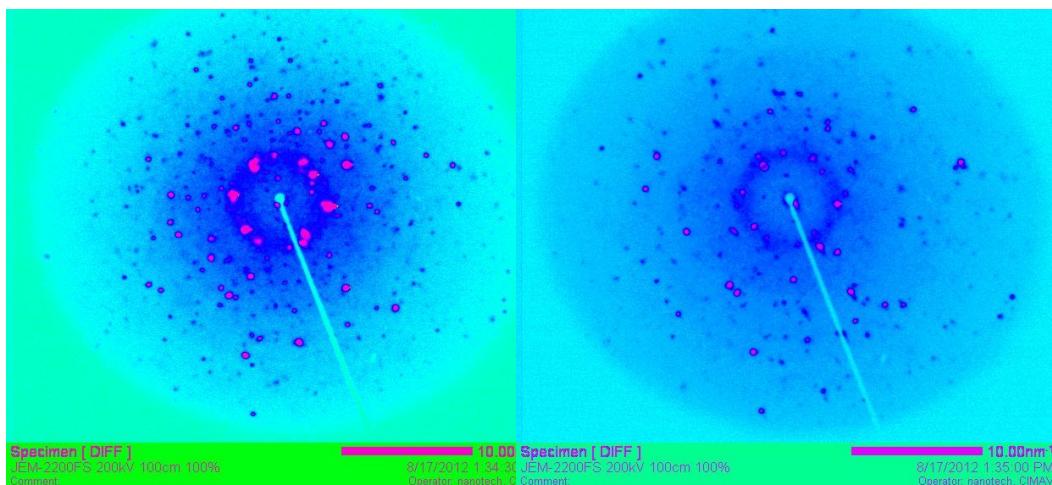
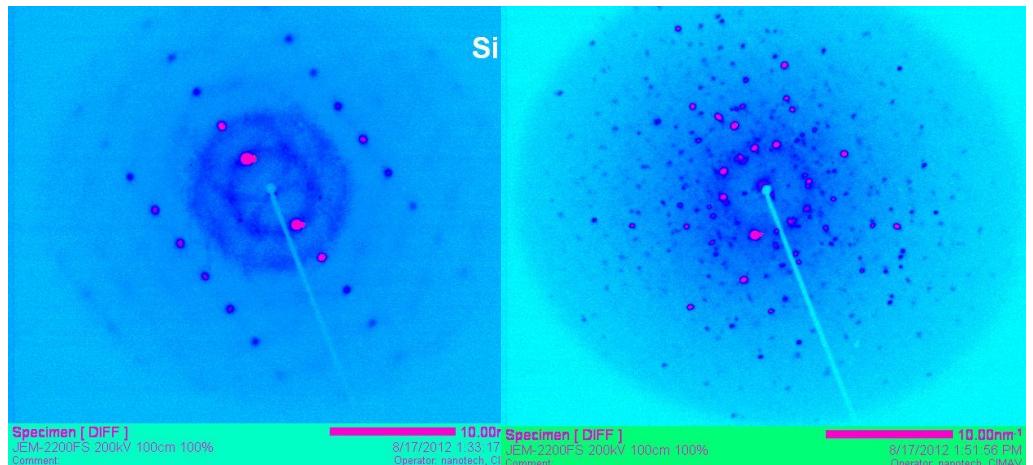
NBD Aleación Metálica



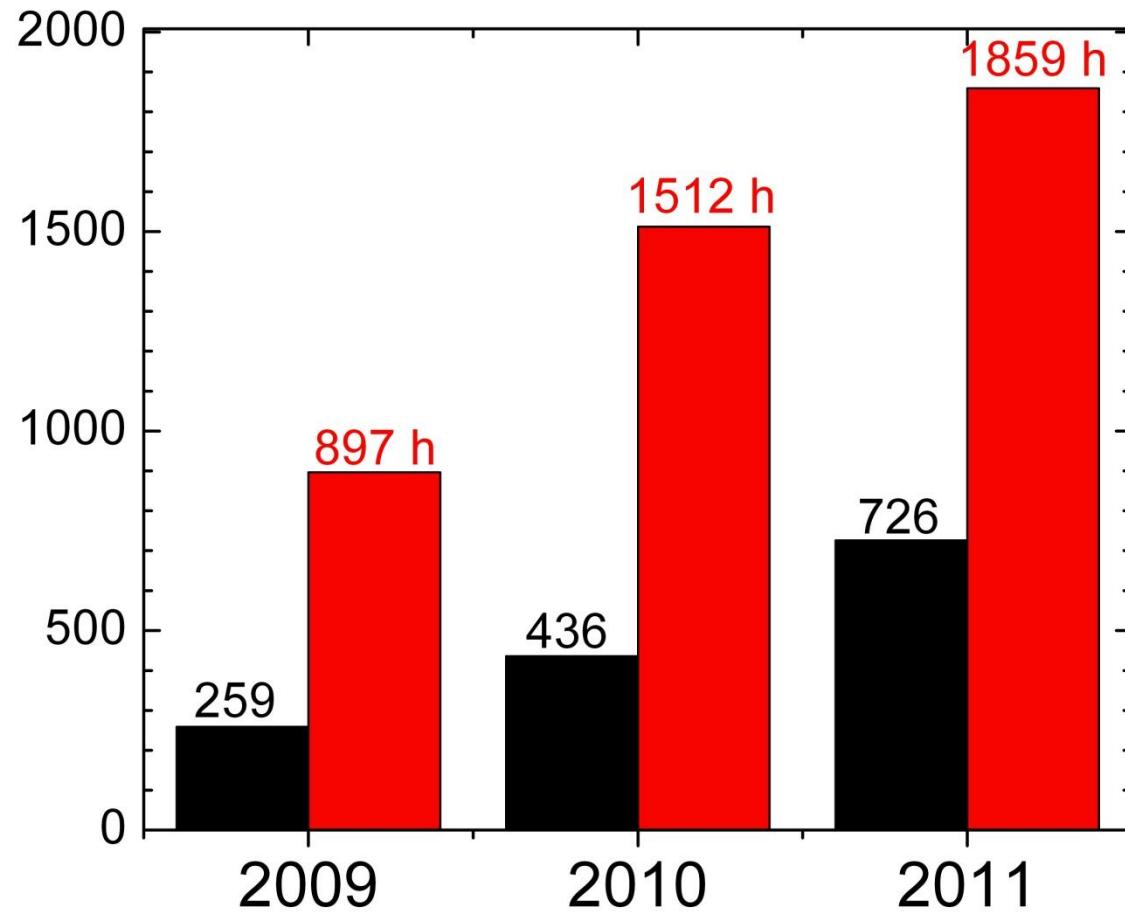
Precipitados <150 nm



NBD Película Delgada



Resumen



40 hrs/semana x 44 semanas = 1760 horas

En la grafica son horas efectivas en el estudio del material
Acondicionamiento, tiempos de mantenimiento etc no incluye.

Gracias y Preguntas!

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