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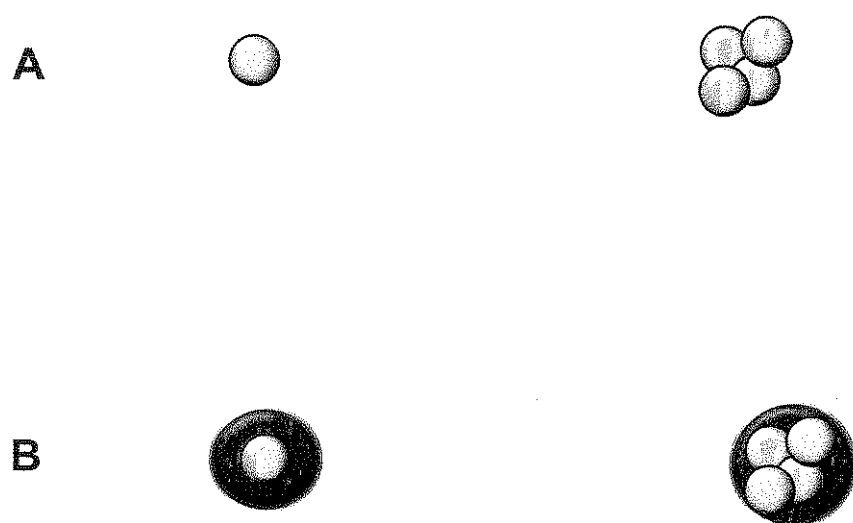


FIGURE 1

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C

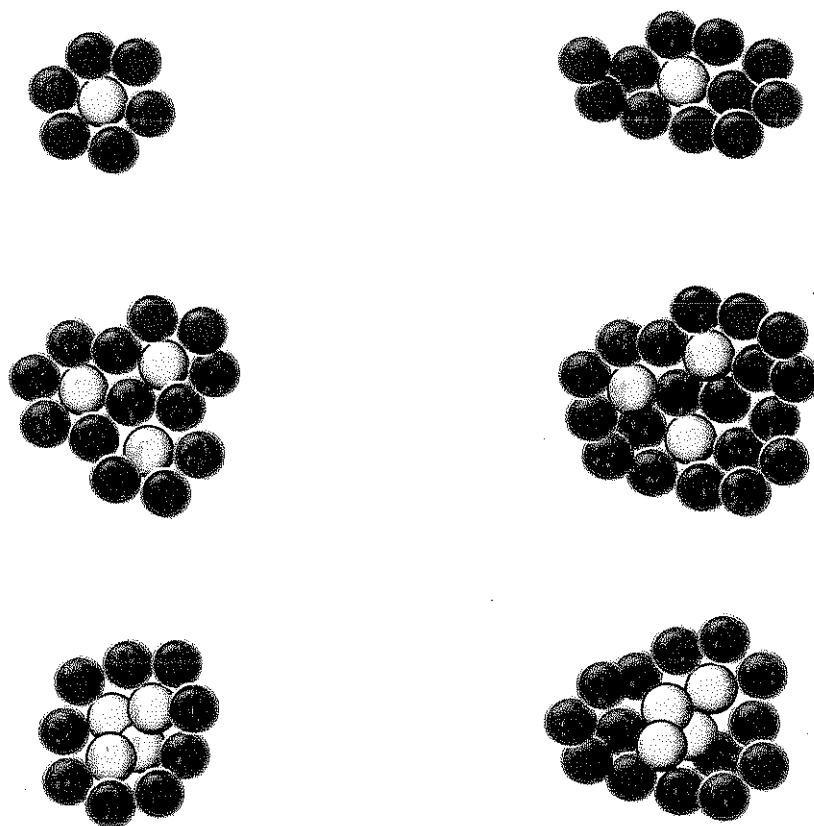


FIGURE 1

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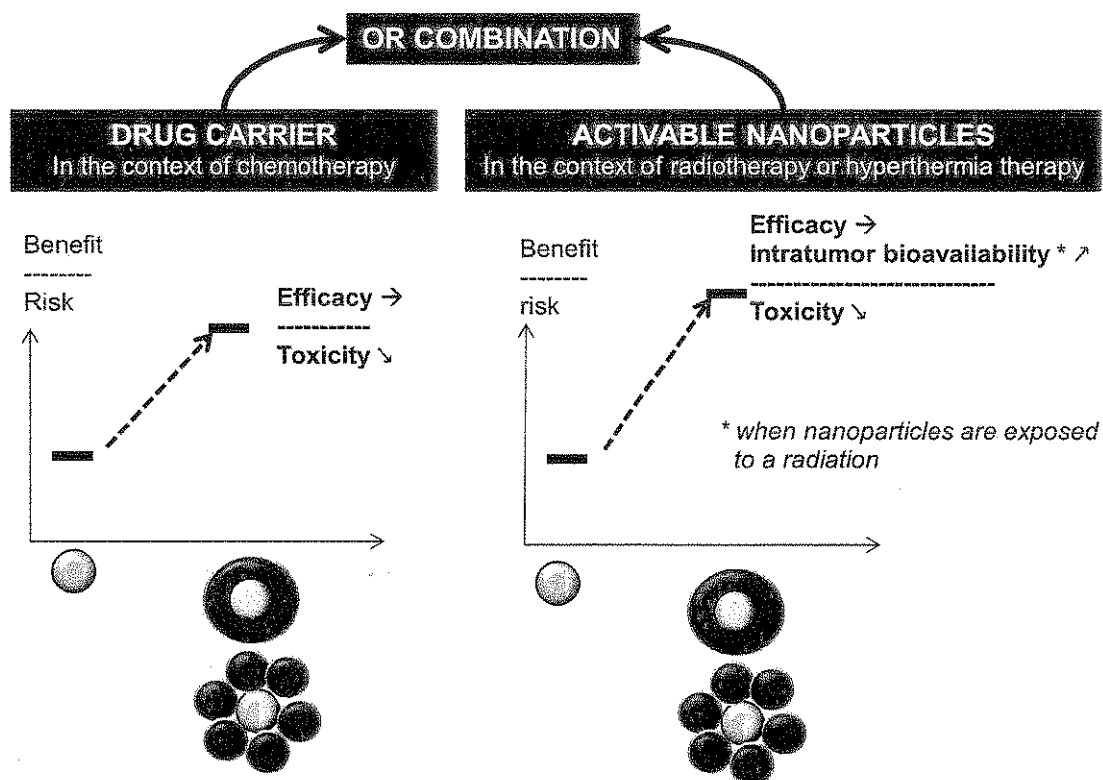


FIGURE 2

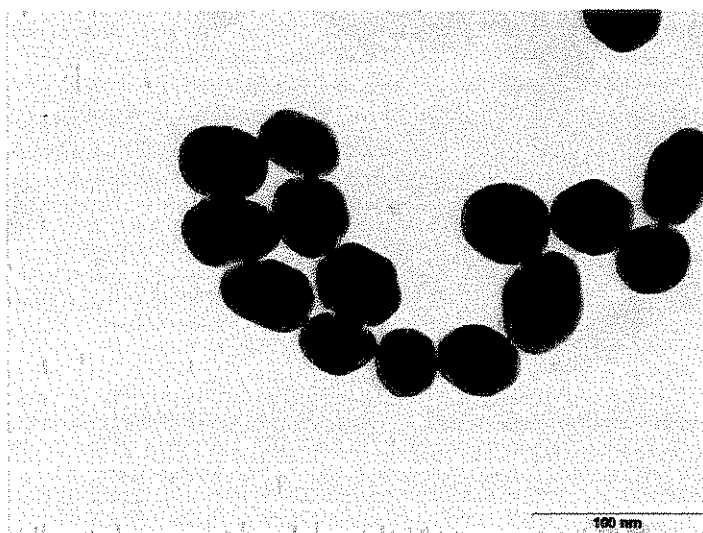
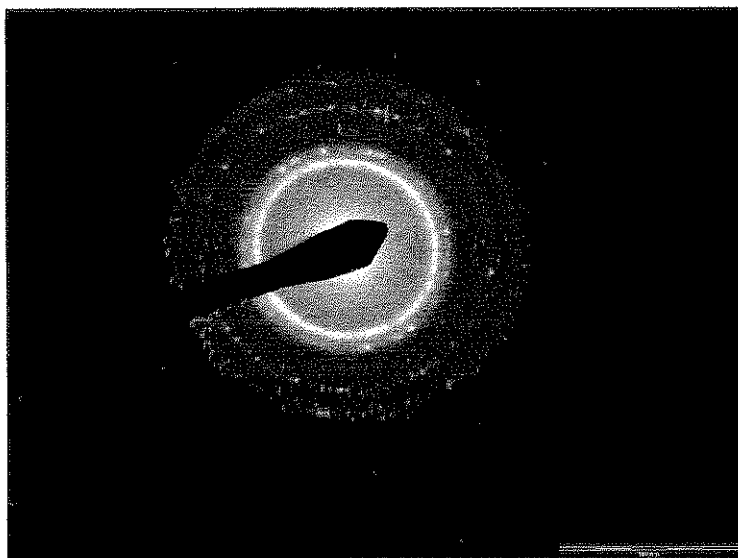


FIGURE 3

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Reference:



Gold nanoparticles from example 1:

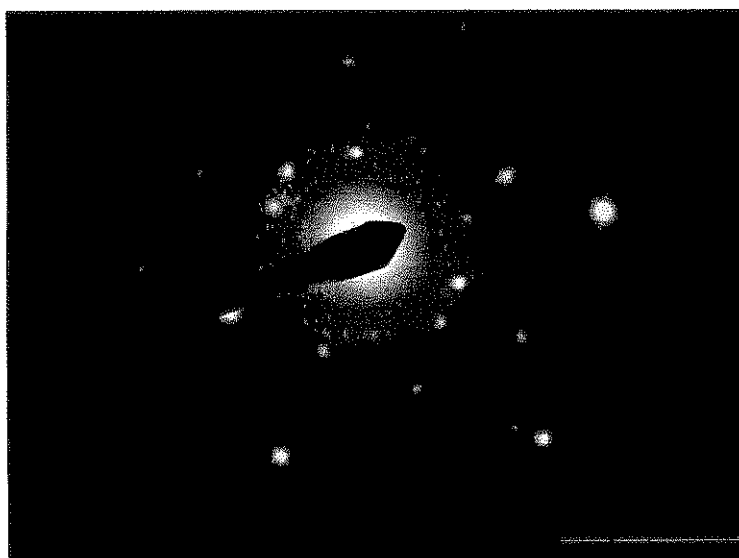


FIGURE 4A

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Reference: gold nanoparticles with CFC structure to determine $L\lambda$:

Diameter (cm)		d_{hkl} (Å)		$L\lambda$
D1	2,5	d_{111}	2,354	2,982
D2	2,9	d_{200}	2,039	2,991
D3	4,1	d_{220}	1,442	2,980
D4	4,8	d_{311}	1,229	2,949
				2,975

Indexation for gold nanoparticles from example 1:

Diameter (cm)		$L\lambda$	d_{hkl} (Å)	Attribution
D1	2,6	2,975	2,266	d_{111}
D2	2,9	2,975	2,035	d_{200}
D3	4,3	2,975	1,399	d_{220}
D4	4,7	2,975	1,279	d_{311}
				Gold CFC structure

FIGURE 4B

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FIGURE 5A

Indexation for gold@HfO₂ nanoparticles from example 4:

Diameter (nm)		Experimental d _{hkl} (Å)	d _{hkl} (Au)	Attribution (Au)	d _{hkl} (HfO ₂)	Attribution (HfO ₂)
D1	2,1	2,798			2,820	d ₁₁₁
D2	2,5	2,356	2,354	d ₁₁₁		
D3	2,9	2,035	2,039	d ₂₀₀		
D4	3,7	1,599			1,600	d ₃₁₁
D5	4,3	1,399	1,442	d ₂₂₀	1,410	d ₃₂₁
D6	4,5	1,316			1,318	d ₂₂₃
D7	4,9	1,226	1,229	d ₃₁₁	1,237	d ₄₁₁
				Gold FCC structure		Hafnium oxide Monoclinic structure

FIGURE 5B

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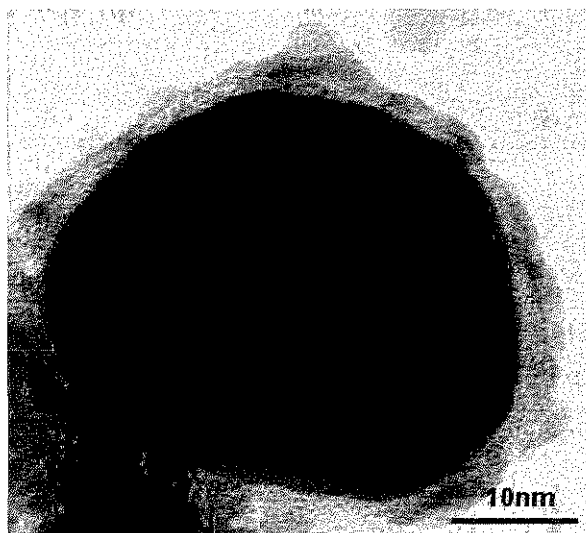


FIGURE 6