

Conventional Ag Flake

- Polycrystal
- Low Reflectance
- High Sintering
- Irregular and Rough
- Wide Size Distribution

Process

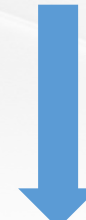
Particle Synthesis



Mill



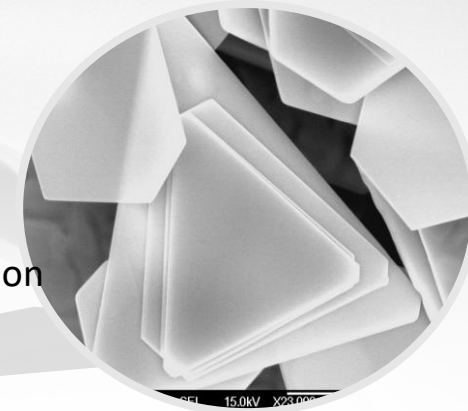
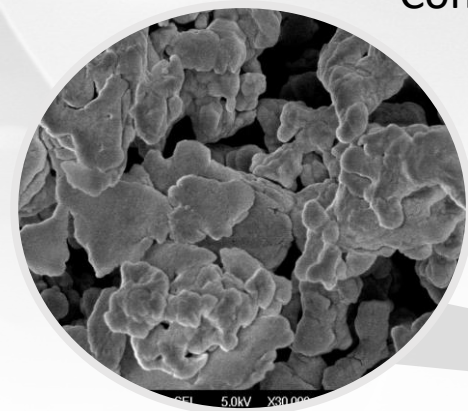
Ag Flake



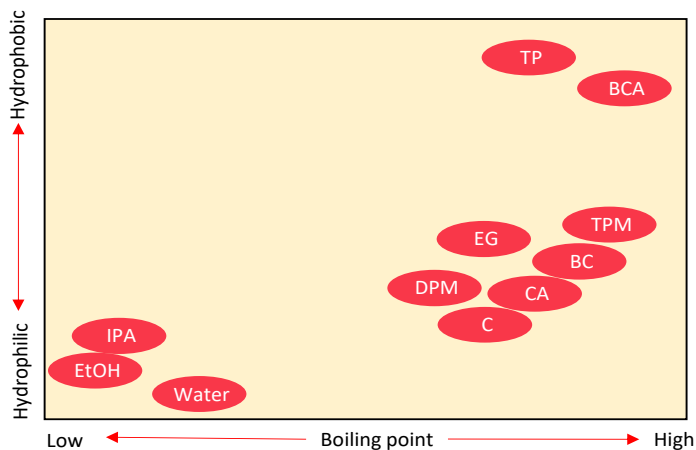
Ag Flake

TKC Ag Flake

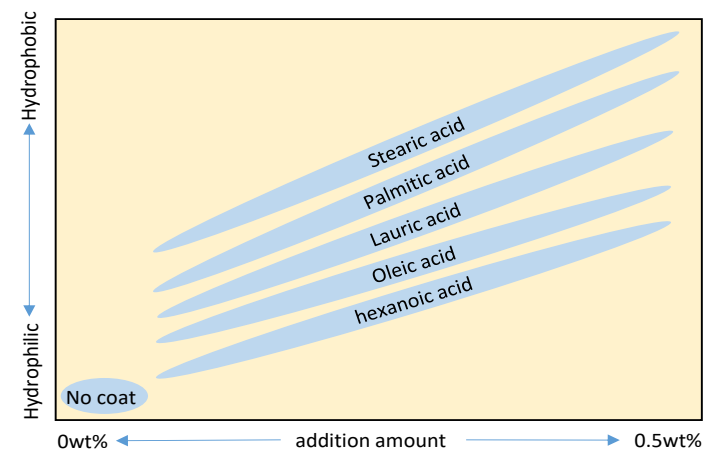
- Single Crystal
- High Reflectance
- Low Sintering
- Smoothness
- Narrow Size Distribution



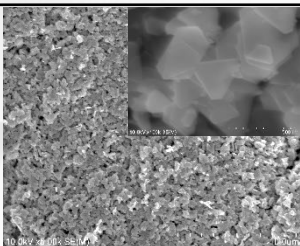
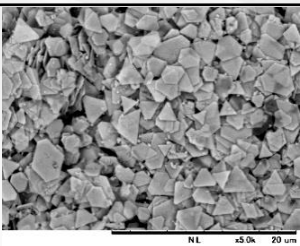
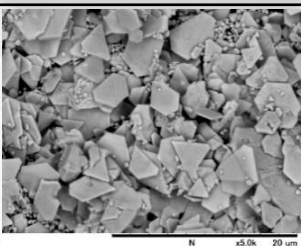
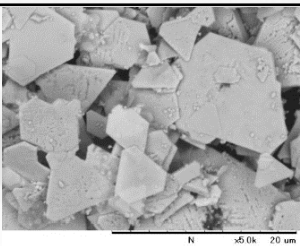
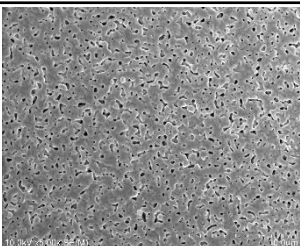
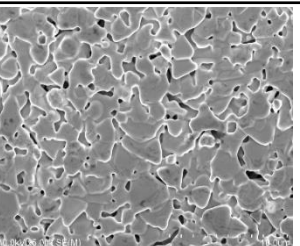
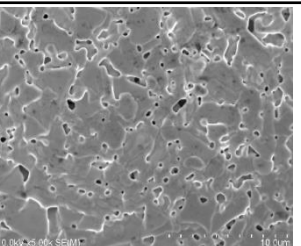
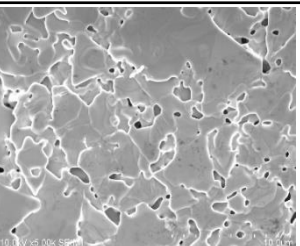
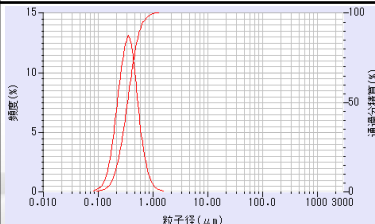
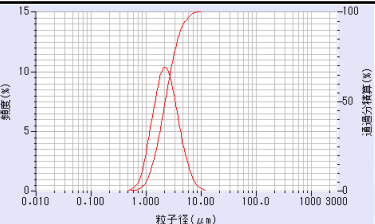
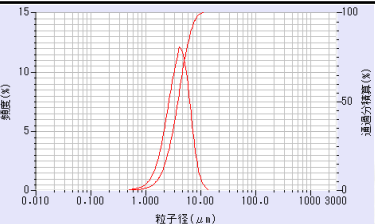
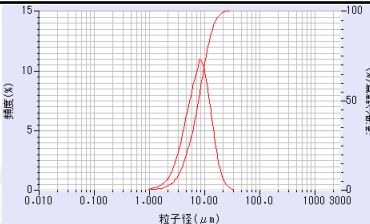
Solvent Type



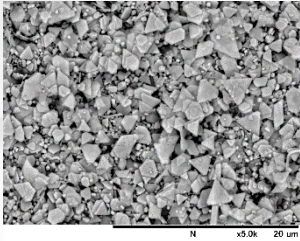
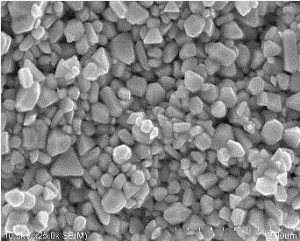
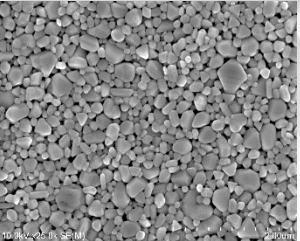
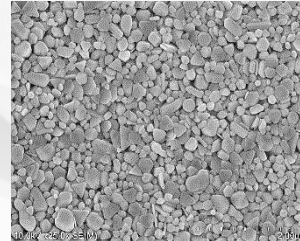
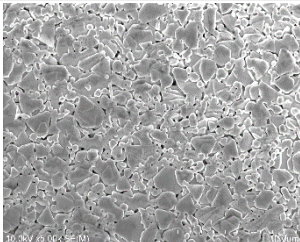
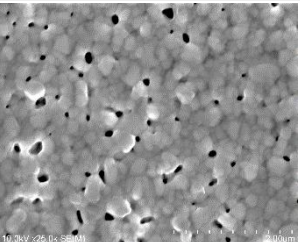
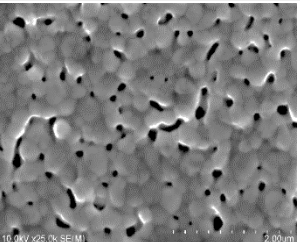
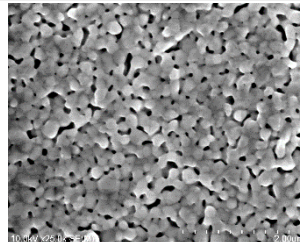
Powder Type



Flake type

Item	N300	M13	M27	M612
SEM Image				
Shape	Flake	Flake	Flake	Flake
Size	0.3~0.5 μm	1.0~3.0 μm	2.0~7.0 μm	6~12 μm
Thickness	≤50nm	40~60nm	60~100nm	60~100nm
BET	1.9~2.9 m ² /g	0.6~1.6 m ² /g	0.5~1.5 m ² /g	0.5~1.5 m ² /g
TD	1.5~3.0 g/cm ³	1.5~3.0 g/cm ³	1.5~3.0 g/cm ³	1.5~3.0 g/cm ³
TG(N ₂)	0.7~1.3%	0.15~0.30%	0.15~0.30%	0.10~0.30%
Sintering Temperature	180~200°C	around 200°C	around 200°C	around 200°C
Sintering Image				
Resistivity(Sintering)	4.4 μΩ·cm	4.0 μΩ·cm	3.8 μΩ·cm	4.4 μΩ·cm
Particle Size Distribution				

Flake and Polyhedron type

Item	LM1	LS0305	LN200	KM120
SEM Image				
Shape	Flake and Polyhedron	Polyhedron	Polyhedron	Polyhedron
Size	0.7~1.3 μm	0.15~0.4 μm	0.15~0.4 μm	0.15~0.3 μm
Thickness	≤100nm	—	—	—
BET	0.5~1.5 m ² /g	1.2~2.2 m ² /g	1.2~2.2 m ² /g	1.5~2.5m ² /g
TD	2.0~4.0 g/cm ³	4.5~6.5 g/cm ³	4.5~6.5 g/cm ³	3.0~4.5g/cm ³
TG(N ₂)	0.10~0.35	0.10~0.35%	0.10~0.30%	0.10~0.30%
Sintering Temperature	160°C~170°C	around 140°C	around 140°C	around 120°C
Sintering Image				
Resistivity(Sintering)	4.9 μΩ·cm	3.6 μΩ·cm	4.1 μΩ·cm	4.7 μΩ·cm
Particle Size Distribution	