



XIAN FUNCTION MATERIAL GROUP CO., LTD

FUNCMATER

FM GROUP

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graph LR; FM[FM GROUP] --- 1((1)); FM --- 2((2)); 1 --- XFM[Xian Function Material Co.,ltd]; 2 --- VISM[VI Semi-conductor Materials Co.,ltd];
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1

**Xian Function Material
Co.,ltd**

➤ Thin Film Coating Materials Unit

Sputtering Targets, Evaporation materials,
Bonding service

High Purity, 99.5%~99.9999%, Customized

Factory Location : Shaanxi, Baoji

2

**VI Semi-conductor Materials
Co.,ltd**

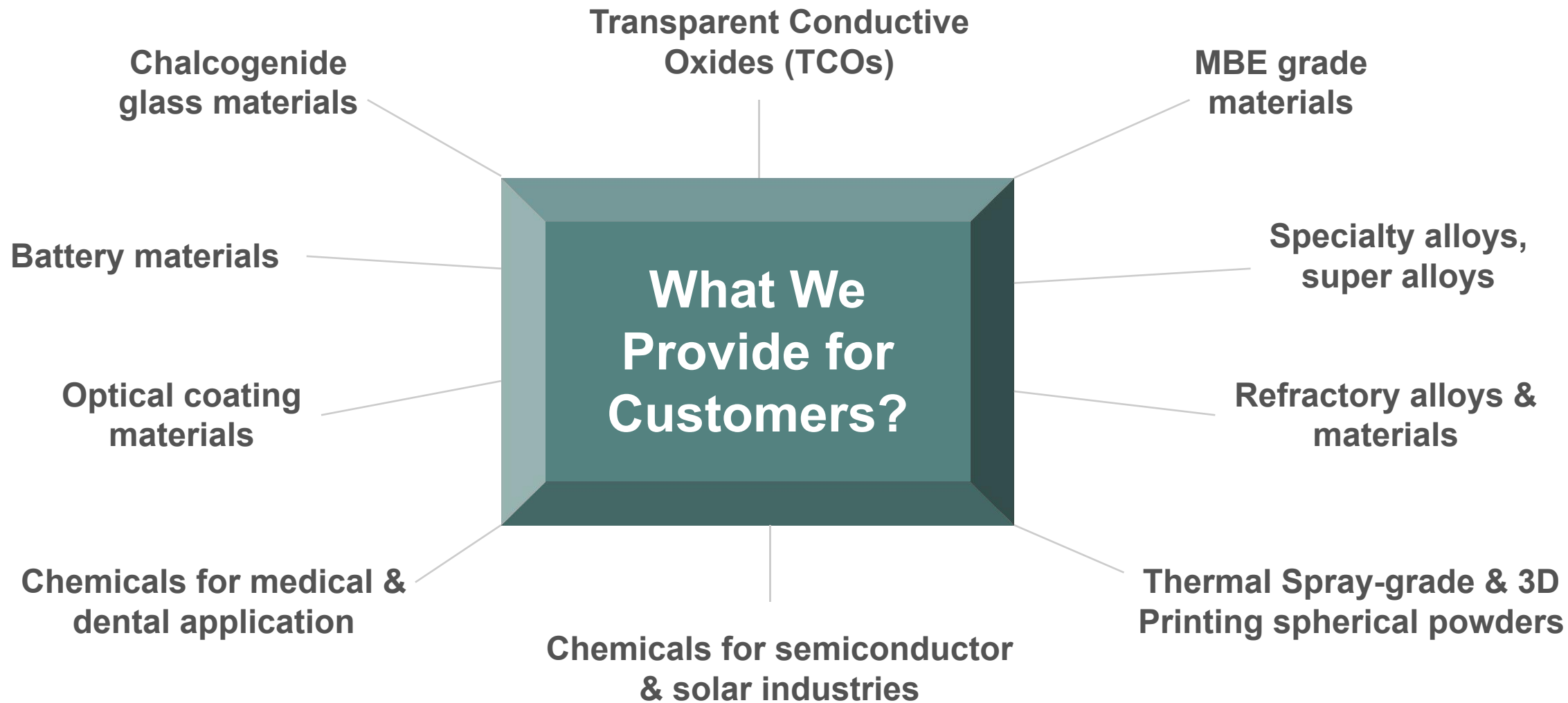
➤ Inorganic Compound Materials Unit

Chemicals, ultra high purity compounds

High Purity, 99.5%~99.9999%

Factory Location: Sichuan, Suining

What we do?



Sputtering Targets

➤ Pure Metal Sputtering Targets

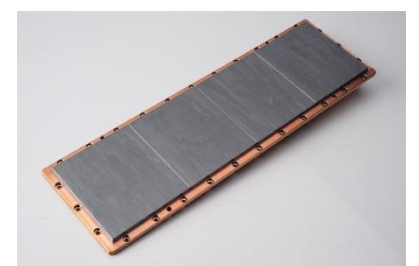
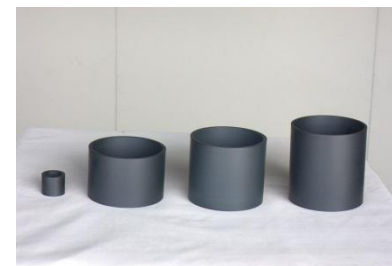
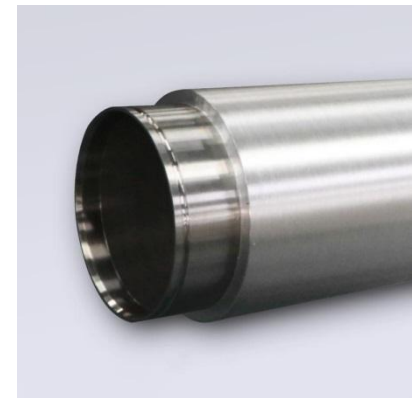
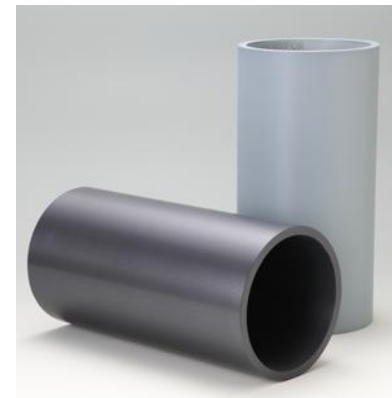
Ag, Al, B, C, Co, Cr, Cu, Fe, Ge, Hf, In, Ir, Mg, Mn, Mo, Nb, Ni, Re, Se, Si, Sn, Ta, Ti, V, W, Zn, Zr...

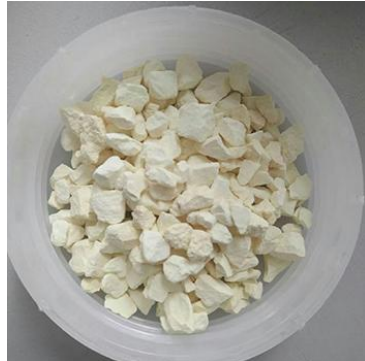
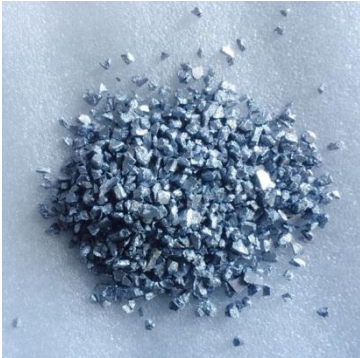
➤ Metal Alloy Sputtering Targets

AlCr, AlCrB, AlCu, AlNd, AlSi, AlTi, CrSiAl, CuCrZr, CuNi, CuTi, CuZr, FeNi, FeNiCr, InSn, IrMn, MoNb, MoTa, MoW, NbTi, NbZr, NiCr, NiCrAl, NiCuTi, NiFe, NiV, PdAg, PdNi, SiCr, SiGe, TiSi, TiTa, VTi, WTa, WTi, ZnAl, NbTiZrMo, CoCrFeNi, FeCrMoNiB, CrMoTaTiVW, AlCoCrCuNiFe, TiTaZrHfW, TiZrCrMo...

➤ Ceramic Sputtering Targets

Al₂O₃, AlON, AZO, AZTO, BaTiO₃, BiFeO₃, BiVO₄, FTO, IGZO, In₂O₃, ITO, KNbO₃, Nb₂O₅, HfO₂, Mg₂SiO₄, MoS₂, MoSe₂, MoS₂-Sb₂O₃, MoSi₂, NiCr₂O₄, PZT, Sb₂O₅, Si₃N₄, SrNbO₃, SrTiO₃, Ta₂O₅, TIG, TiO₂, V₂O₅, WO₃, WC, VN, Y₂O₃, YBCO, ZrO₂, ZITS, ZnO, ZnO:MgO, ZnS...





Evaporation Materials

➤ Pure Metal

Ag, Al, Au, C, Co, Cr, Cu, Hf, In, Li, Mg, Mn, Mo, Nb, Ni, Pd, Pt, Re, Se, Si, Sn, Ta, Ti, V, W, Zr...

➤ Oxides

Al₂O₃, CaO, CeO₂, Co₃O₄, Cr₂O₃, Fe₂O₃, HfO₂, ITO, MgO, Nb₂O₅, SiO, SiO₂, SnO₂, SrO, Ti₃O₅, Ta₂O₅, TiO₂, TiO₂/ZnO, WO₃, ZnO, ZrO₂, YAG...

➤ Other Evaporation Materials

Cr₃C₂, FeB, Nb₄AlC₃, SiC, Ti₃AlC₂, TiC, Ti₃SiC₂, Cd₃Sb₂, Ag₂Se, Al₂Se₃, As₂S₃, FeS₂, Ga₂S₃, Ga₂Te₃, GeS, GeSe₂, HfS₂, HfSe₂, HgTe, In₂S₃, PbSe, PbTe, ZnS, ZnSe, BaF₂, CaF₂, BiI₃, CeF₃, CuI, GeI₂, InF₃, LiF, MgF₂, TbBr₃, TlI₃, YF₃...

Ultra-high Purity Materials

PRODUCT NAME	FORMULA	PURITY	SPECIFICATION
Tellurium	Te	7N	Lumps, Granules
Cadmium	Cd	7N	Lumps, Granules
Indium	In	7N	Lumps, Granules
Gallium	Ga	7N	Lumps, Granules, Rod
Antimony	Sb	7N	Lumps, Granules, Rod
Arsenic	As	7N	Lumps, Granules, Rod
Scandium	Sc	5N	Lumps, Granules
Aluminum	Al	6N5	Lumps, Granules, Rod
Zinc	Zn	7N	Lumps, Granules, Rod
Selenium	Se	6N	Lumps, Granules
Bismuth	Bi	6N	Lumps, Granules
Tin	Sn	7N	Lumps, Granules, Rod

*Purity from 5N to 7N5, offer customization



Lithium ion Battery Materials

Advanced anode and cathode materials.

- High energy Density
- Low self-discharge Rate



- GeS
- GeS₂
- SiS₂
- LaAlO₃
- LaCrO₃
- LaNiO₃
- La₂Zr₂O₇
- La-BaSnO₃
- (La_{0.3}Sr_{0.7})MnO₃
- (La_{0.8}Sr_{0.2})_{0.98}MnO_{3-x}
- LaFe(x)Al(1-x)O₃; x=0.2
- LaMn(x)Al(1-x)O₃; x=0.2
- LaNi(x)Al(1-x)O₃; x=0.2
- LaV(x)Al(1-x)O₃; x=0.2
- LLZO (Li₇La₃Zr₂O₁₂)
- LSAT ((La,Sr)(Al,Ta)O₃

- Li₃PS₄
- Li₆PS₅Cl
- Li₆PS₅Br
- Li₆PS₅I
- Li₁₀GeP₂S₁₂Cl
- Li₂SiO₃
- Li₂ZrO₃
- Li₃PO₄
- Li₄SiO₄
- Li₄Ti₅O₁₂
- LiNbO₃
- LiAlO₂
- LiNO₃
- LiTaO₃
- LiCoO₂

- Li₂S
- LiOH
- LiOH·xH₂O
- LiCoPO₄
- LiFePO₄
- LiMn₂O₄
- LiMnPO₄
- LiNiPO₄
- LiTi₂(PO₄)₃
- LiTiAl(PO₄)₃
- LiNiCoAlO₂
- LiNiMnCoO₂
- Li₃V₂(PO₄)₃
- LiAlGe(PO₄)₃
- LiNi_{0.8}Co_{0.2}O₂
- Li_{3.5}Si_{0.5}P_{0.5}O₄



Chalcogenide Materials

- Attractive optical and electrical properties
- As a new generation of light absorption materials candidate materials

Sulfides

- Ag₂S
- As₂S₃
- CdS
- Ce₂S₃
- CoS₂
- Cu₂S
- FeS
- FeS₂
- Ga₂S₃
- GeS
- HfS₂
- In₂S₃
- MoS₂
- Mo₆S₈
- SnS₂
- TaS₂
- V₅S₈
- ZITS
- ZnS
- ZrS₂
- TiS₂
- SiS₂
- Li₂S
- GeS₂

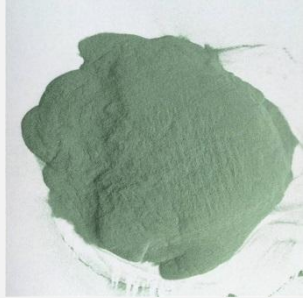
Selenides

- Ag₂Se
- Al₂Se₃
- BiTeSe
- CaSe
- CdSe
- EuSe
- GeSe₂
- HfSe₂
- Li₂Se
- MoSe₂
- NbSe₂
- PbSe
- SnSe
- SnSe₂
- WSe₂
- ZnSe

Tellurides

- Bi₂Te₃
- BiSbTe
- CdTe
- Ga₂Te₃
- GeSbTe
- Li₂Te
- MoTe₂
- PbTe
- SnTe
- WTe₂
- ZnTe

Carbides/Nitrides/Borides/Silicides Compound Materials



Carbide Materials

Al_4C_3 , B_4C , C , Cr_3C_2 , HfC , Mn_2C , Mo_2C , MoC ,
 NbC , SiC , TaC , WC , VC , TiC , ZrC



Nitride Materials

AlN , BN , Ca_3N_2 , CrN , FeN , InN , Mg_3N_2 , HfN , NbN ,
 Si_3N_4 , Ta_3N_5 , TiN , VN , ZrN



Boride Materials

AlB_2 , B , CaB_6 , CeB_6 , FeB , CrB_2 , HfB_2 , LaB_6 , MgB_2 ,
 MnB , MoB , SiB_6 , SmB_6 , TaB_2 , TiB_2 , ZrB_2



Silicide Materials

MoSi_2 , HfSi_2 , TaSi_2 , ZrSi_2 , WSi_2 , TiSi_2 , Mg_2Si ,
 CoSi_2 , FeSi_2 , CrSi_2 , VSi_2

Halide Materials

- Ultra-High Purity, up to 99.999%
- Unique spectral characteristics for luminescent materials
- Custom ampoulation available, Under argon atmosphere

FLUORIDES

BaF2
CaF2
CeF3
CsF
ErF3
GdF3
MgF2
LiF
NaF
AlF3
InF3
TiF4
PbF2
SmF3
SrF2
YbF3
YF3
ZnF2

CHLORIDES

CeCl3
DyCl3
ErCl3
GdCl3
NbCl5
LaCl3
LiCl
NdCl3
WCl6
NiCl2
HfCl4
TaCl5
CsCl
NaCl
MoCl5
PbCl2
PrCl3
SiCl4
YbCl3
SnCl4

BROMIDES

CeBr3
KBr
PbBr2
SnBr4
TbBr3
ZnBr2

IODIDES

CuI
AlI3
GeI2
BiI3
PbI2
TeI4
CsI
SnI4
CaI2-4H2O



Rare Earth Materials

- High Purity, Comprehensive(Multiple elements)
- Excellent magnetic, optical and electrical properties
- Used for metallurgy, petrochemical, glass ceramics, agriculture, new materials

Pure Metal: La, Ce, Nd, Sm, Eu, Gd, Tb, Dy, Er, Tm, Yb, Y, Sc, Lu

Oxides: Y₂O₃, CeO₂, Ce(OH)₄, Eu₂O₃, Lu₂O₃, Sm₂O₃, Sc₂O₃, Pr₆O₁₁, Tm₂O₃, Nd₂O₃, La₂O₃, Ho₂O₃, Er₂O₃, Tb₄O₇, Yb₂O₃, Dy₂O₃, Gd₂O₃... **Halides:** CeBr₃, CeCl₃·7H₂O, DyCl₃, EuCl₃·6H₂O, GdF₃, LaCl₃·7H₂O, TbBr₃, TmCl₃, YbCl₃·6H₂O, YbF₃, YF₃, YCl₃, GdCl₃, PrCl₃, SmCl₃, NdCl₃, ErCl₃...

Salts: Gd(NO₃)₃·xH₂O, Y₂(CO₃)₃·xH₂O, LaAlO₃, DyScO₃, Eu₂(SO₄)₃·8H₂O, GdScO₃, LaCrO₃, Lu(AC)₃·4H₂O, Sc(NO₃)₃·6H₂O, YVO₄, YIG, Y₃Al₅O₁₂...

Alloy: SmCo₅, AlSc, CeGd, CeSm, CrY, MoLa, MgY, LaNi₅, YNiAl, ZrY, Er₃Ni, SmMn₂Ge₂, La_{0.95}Ce_{0.05}Si₂...



Nano Powders

- 20-800nm, 99.0%~99.9%
- Process: Gas-Phase: CVD, LCVD;
Liquid-Phase: SOL-GEL, hydrothermal synthesis, co-precipitation

Nano Metal: Si, Ag, Ni, Co, Sn, W, Mo, Fe, Al, Ti, Cr, Ta, In, Bi, Zn, Cu

Nano Alloy: CuSn, CuNi, CuZn, SnBi, FeNi, AlSi

Nano Oxides: Al₂O₃, ZnO, TiO₂, ZrO₂, CuO, Fe₂O₃, Fe₃O₄, SnO₂, NiO, ITO, ATO, MgO, MoO₃, Nb₂O₅...

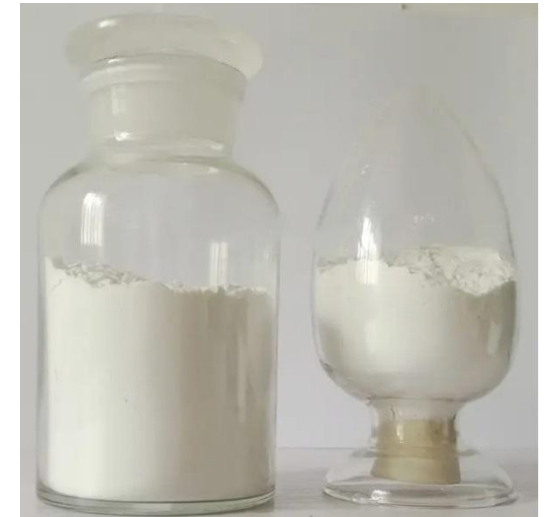
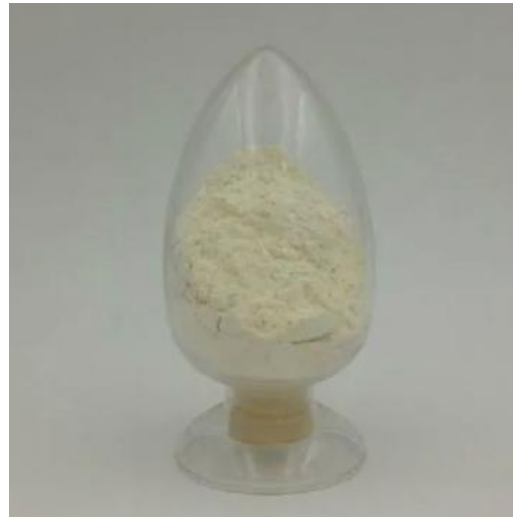
Nano Carbides: SiC, TiC, Cr₃C₂, B₄C, ZrC, TaC, Mo₂C, NbC, WC...

Nano Nitrides: AlN, BN, Si₃N₄, TiN, VN, CrN, ZrN...

Nano Borides: ZrB₂, TiB₂, LaB₆, HfB₂, B

Nano Sulfides: MoS₂, WS₂

Nano Silicides: TaSi₂, HfSi₂, MoSi₂, ZrSi₂



3D Printing Spherical Powders

- No satellite powder
- Good flowability
- High sphericity
- High purity and Vibration density
- Uniformity of chemical composition

Titanium-Base Alloy Spherical Powder: GR1(Ti), GR5(Ti-6Al-4V), GR5(high Tenacity) (Ti-4Al-2V), Ti-6.5Al-3.5Mo-1.5Zr-0.3Si, GR6(Ti-5Al-2.5Sn), Ti-8Al-1Mo-1V, Ti-6.5Al-1Mo-1V-2Zr, Ti47Al2Cr2Nb, TiAlNb ...

Nickel-Base Alloy Spherical Powder : Hastelloy Alloy X(Ni-Mo-Cr-Fe), HastelloyC276(Ni-Mo-Cr-Fe-W), Hastelloy188(Co-Ni-Cr-W), Inconel 625(0Cr20Ni65Mo10Nb4), Inconel718(Ni-Cr-Fe-Nb-Mo) ...

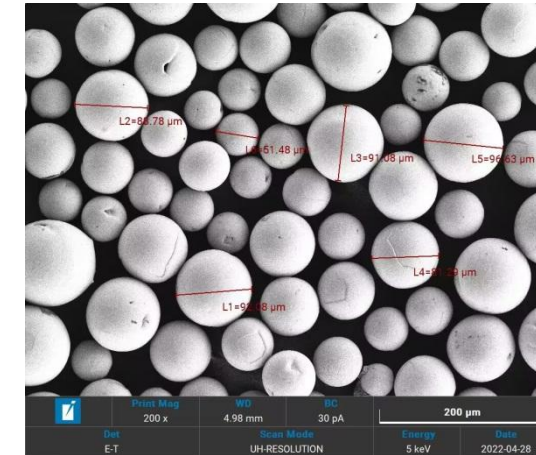
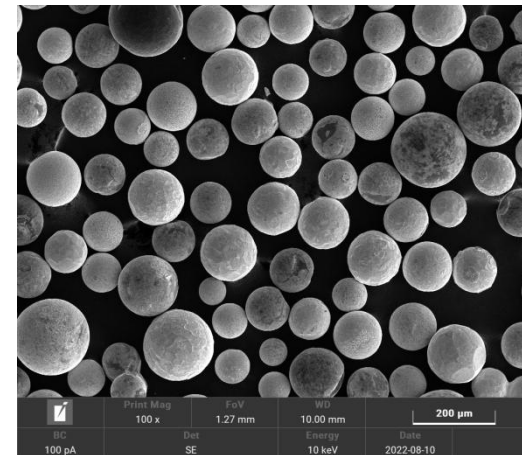
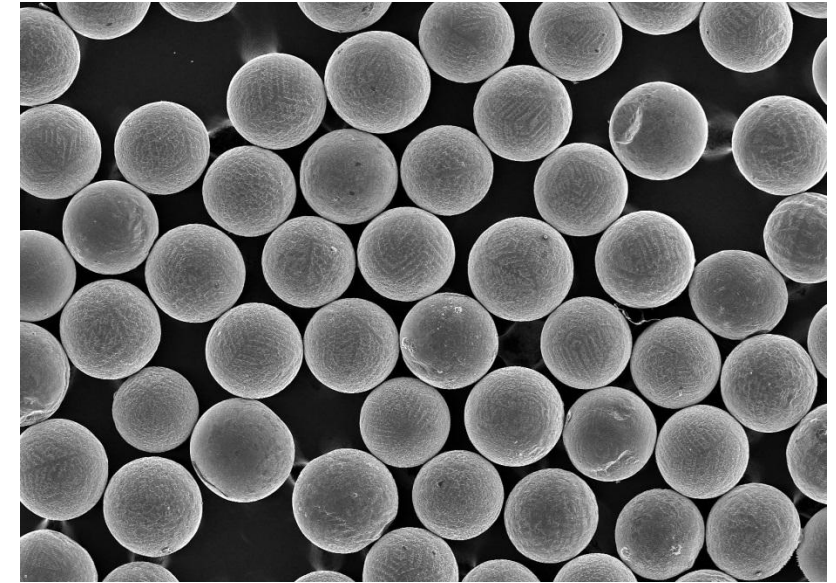
Aluminum-Base Alloy Spherical Powder : A14130(AlSi12), AlSi9Cu3, AlMg4.5Mn0.4, A03560(AlSi7Mg), A03600(AlSi10Mg), 2024(AlCuMnMgCrZn), 7075(AlZnMgCu1.5) ...

Stainless steel Spherical Powder: 17-4PH, 17-7PH, 304L, 316L, 410S, H13 Die steel, 420 Die steel ...

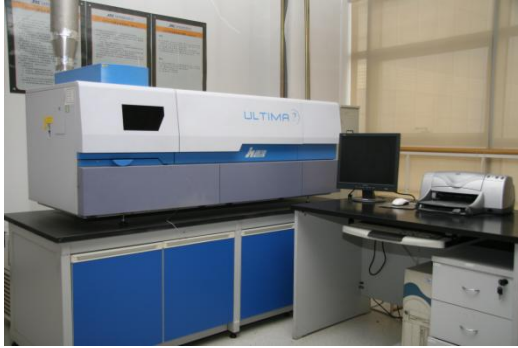
Cobalt-Base Alloy Spherical Powder : Stellite21(Co-Cr-Mo), Stellite6(Co-Cr-W), Stellite12(Co-Cr-W-Fe), CoCrMoW ...

Copper-Base Alloy Spherical Powder : CuFe, CuCr, CuCrZr ...

Customized Alloy Spherical Powder: FeCoNiCrMn, NiAl, NiTi50, Nb521 ...



Testing Lab



ICP-OES



N, H, O analyzer



C, S analyzer



XRD



Laser Partical analyzer



Corporate Vision

FUNCMATER aspire to become the leading Supplier of Advanced Chemical Materials for the Semiconductors, photovoltaics, solar energy industries



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