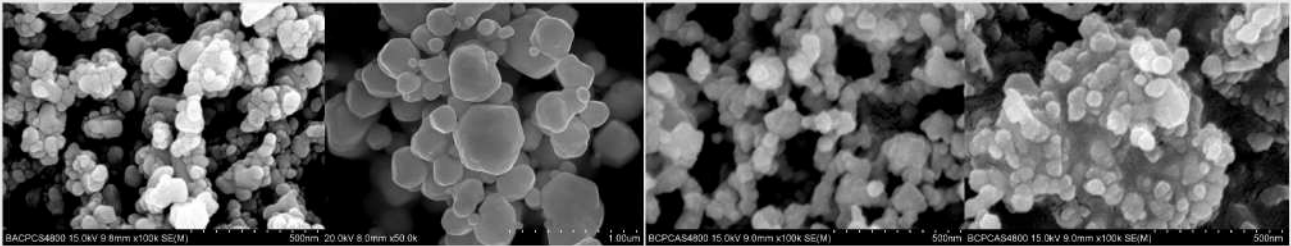


# Metal & Alloy Nanoparticles



Date updated: Sept. 20, 2010

Various Metal & Alloy Nanopowders with high quality available commercially

● Ag	● Ni	Precious Metal	Metal Alloy
● Al	● Si	✓ Au	
● B	● Sn	✓ Ir	✓ Cu/Zn
● Cu	● Ta	✓ Pd	✓ Fe/Co
● Co	● Ti	✓ Pt	✓ Fe/Ni
● Cr	● W	✓ Rh	✓ Ti/Ni
● Fe	● Zn	✓ Ru	✓ Others
● Mo	● Others		

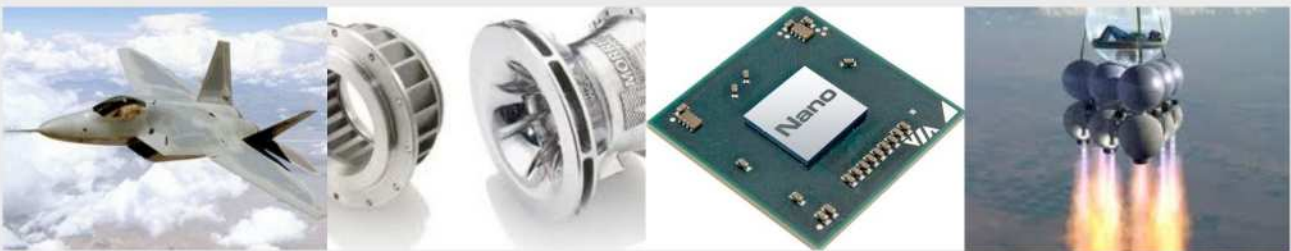
**Advantages of Nano Metal Powders:**

- Increased Surface Area
- Increased Electrical Conductivity
- Enhanced Magnetic Properties
- Size dependant absorption properties
- Faster sintering kinetics

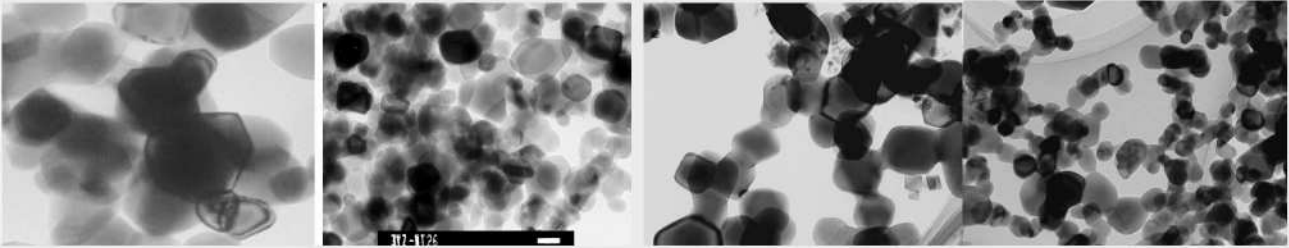
**Applications of Nano Metal Powders:**

- Catalysts & Hydrogen Storage
- Solid Rocket Fuel
- Conducting Paste
- Magnetic tapes & fluid
- Targeted drug delivery
- Metallic paint

New field exploiting the advantages of nanopowders continue to be discovered. If you have an application that could benefit from this new technology, please contact us.



# Oxide Nanopowders



Date updated: Sept. 20, 2010

Various Oxide Nanopowders with high quality available commercially

## List of available Oxide Nanopowders

- Al<sub>2</sub>O<sub>3</sub>, Alpha & Gamma
- ATO
- CaO
- Co<sub>3</sub>O<sub>4</sub>
- Cr<sub>2</sub>O<sub>3</sub>
- CuO
- Fe<sub>3</sub>O<sub>4</sub> & Fe<sub>2</sub>O<sub>3</sub>
- ITO
- In<sub>2</sub>O<sub>3</sub>
- MgO & Mg(OH)<sub>2</sub>
- MoO<sub>3</sub>
- Ni<sub>2</sub>O<sub>3</sub> & NiO
- SiO<sub>2</sub>
- SnO<sub>2</sub>
- TiO<sub>2</sub>
- WO<sub>3</sub>
- ZnO
- ZrO<sub>2</sub>
- .....

## List of Complex Oxide Nanopowders

- 3YSZ, 5YSZ, 8YSZ
- CoFe<sub>2</sub>O<sub>4</sub>
- GDC
- LiFePO<sub>4</sub>
- LSM Cathode nanopowder
- LSCF Cathode nanopowder
- SSC nanopowder & micro-powder
- SDC nanopowder & micro-powder
- .....
- Other customized Complex Oxides



## Advantages of NaBond Nano Oxides

- High Purity
- High & Constant quality
- Lowest Cost
- Short lead time for large scale quantity
- Easy to disperse

## Shipping

Almost all Oxide Nanopowders from NaBond are not considered hazardous and therefore is not regulated by DOT or IATA.

## Storage

Oxide Nanopowders have a shelf life of or more than 2 years. Keep at a dry & cool place.

NaBond Technologies Co., Limited <http://www.nabond.com>

Head office: 1001, Fourseas building, Nathan Rd, KL, HONG KONG

Shenzhen office: 402-406, No. 13rd Bldg, Zhongxing Industrial Park,

Chuangye Rd, Nanshan, Shenzhen, China, 518054

Email: [info@nabond.com](mailto:info@nabond.com)

Tel: +86-755-89801091

Fax: +86-755-86058970

Japanese Sales Rep:

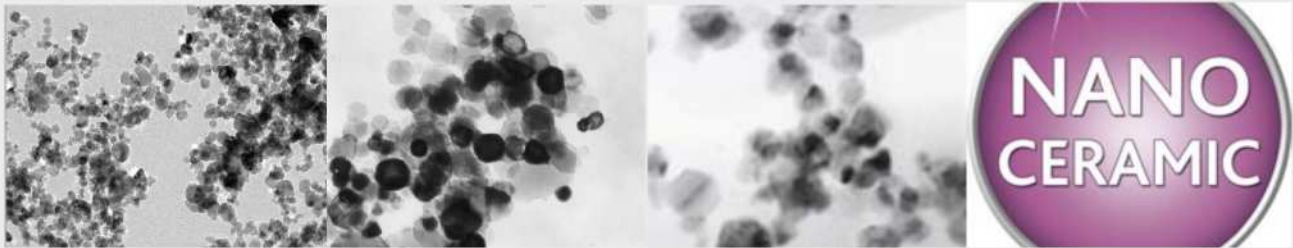
New Metals & Chemicals Corporation

Contact email:

[ito@newmetals.co.jp](mailto:ito@newmetals.co.jp) 伊藤 (Tokyo)

[kuriya@newmetals.co.jp](mailto:kuriya@newmetals.co.jp) 栗谷 (Osaka)

# Carbide, Boride & Nitride Nanopowders



Date updated: Sept. 20, 2010

Various Carbide, boride, Nitride Nanopowders with high quality available commercially

- AlN
- BN
- B4C
- Si3N4
- SiC, nanopowder & whiskers
- SiB6
- TiC
- TiN
- WC
- ZrB2
- TiB2
- .....

### Applications in Astronautic /Aero nautic Industry

- ★Ceramic-Based Compound Materials
- ★Metal-Based Compound Materials
- ★Functional Compound Materials
- Nano-ZrC, used to strengthen thermal protection materials
- Nano-AlN, used to improve heat-conducting performance of insulated mica tape of high-power motor
- Nano SiC, ZrC, TiC, TiN and B4C on the metal surface can bring superabrasion resistance and self-lubrication.
- Nano-SiC used in radar and stealth materials as wave-absorber.
- Adding Nano-Si, SiC, Si3N4 and TiN to the alloy of aluminum, copper, silver, steel and iron can make new-type alloy materials of light weight, high strength and good thermal stability.
- Nano-Si3N4 in large ceramic missile shield.

### Advantages of Nano ceramic powders:

- 🌟 Improve the intensity, tenacity and tractility of Metals, Polymers, and Resins.
- 🌟 Nano-TiN can serve as a nucleating agent when applied to modified thermoplastic engineering plastic. Nano-TiN also has excellent electric conductivity.
- 🌟 Nano-AlN has super thermal conductivity.
- 🌟 The application of nano ceramic powders to coating can improve the abrasion resistance, corrosion resistance and oxidative stability.

