

Chemical Coating Solution (Sol-Gel)

Coating Solutions for High-Performance Piezoelectric Films

Tailored PZT Sol-Gel solutions designed for superior crystallinity and uniform thin-film fabrication.



PZT Sol-Gel Solution

- Lifetime : over 3 months
- Thickness per one layer : 40 nm – 250 nm (according to molar ratio)
- Precise composition control Pb and Zr/Ti ratio (within $\pm 2\%$)
- Easy dopant addition : Nb, La, Sr, Mn, Mg and customers preference
- Excellent reproducibility
- Excellent electrical properties

Lead-free Sol-Gel Solution

KNN or BNKT-based

- Lifetime : about 3 months
- Thickness per one layer : 50 nm – 100 nm (according to composition & molar ratio)
- Precise composition control
- Easy dopant control
- Excellent reproducibility
- Excellent electrical properties
- Non-toxic solvent
- Good bio-compatibility
- CSD process flow will be provided

Multi-Components Chemical Solutions

For dielectric semiconductors, conductors, thermoelectric oxide and functional oxides

- Materials : BaTiO₃, (Ba, Sr)TiO₃, ZnO-based multi-components, (La, Ni) CoO₃-based p-type, La(Ca, Mn)O₃-based n-type, Bi based pyrochlore and customized materials
- Solution concentration 0.25-0.4 mol/L (30-100 nm/layer)
- Shelf lifetime of solution : 3 months (guaranteed lifetime)

- Solvent modified 2-methoxyethanol, methanol, ethanol or other alcohol (customers' reference)
- CSD process flow will be provided
- Other customized materials available after discussion for detailed specification

Single Components Chemical Solutions

For dielectric and functional oxides

- Materials : Al₂O₃, TiO₂, ZrO₂, SiO₂, ZnO and customized materials (customers' request)
- Solution concentration 0.25-0.4 mol/L (20-100 nm/layer)

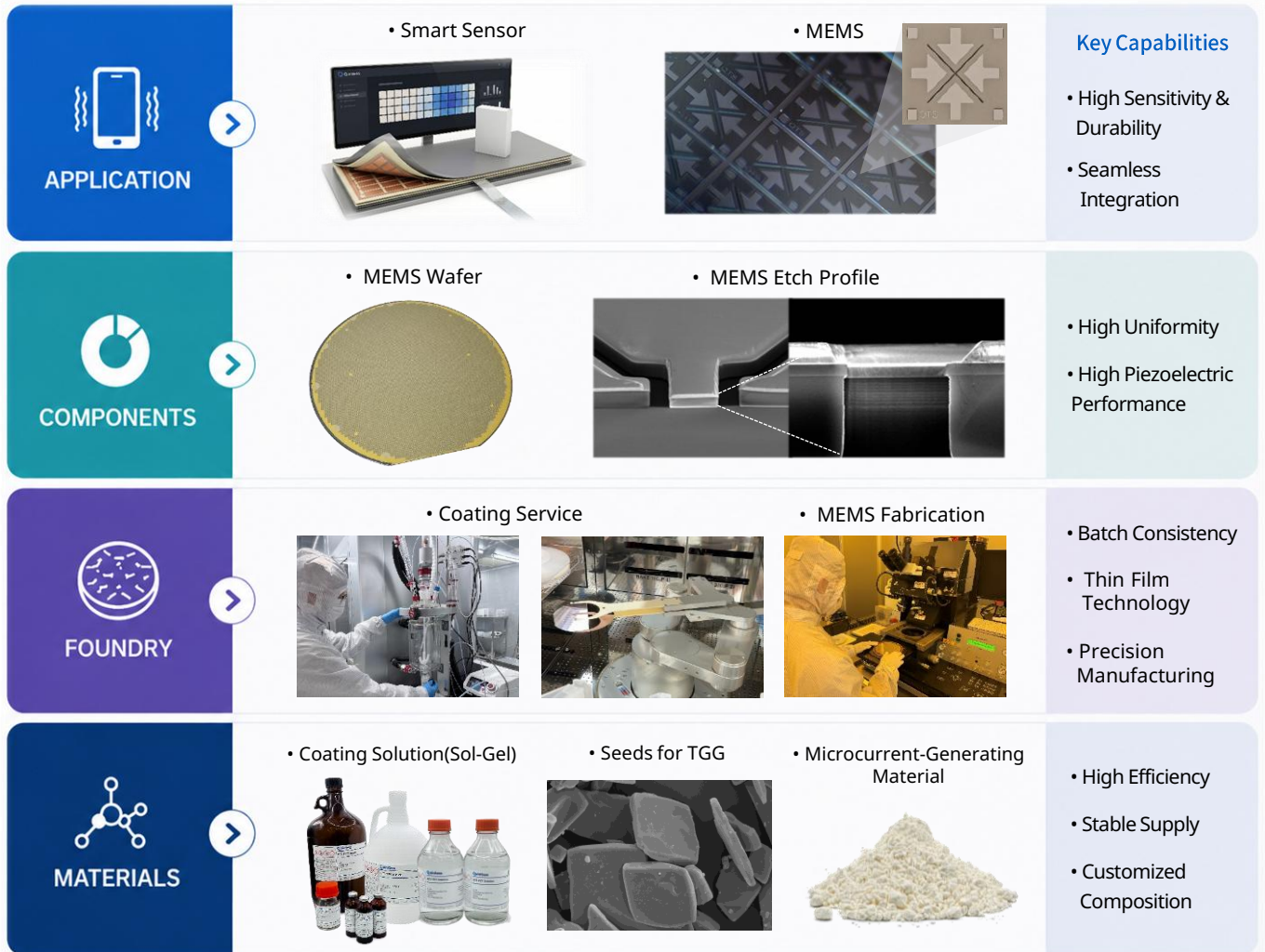


Your Reference, Our Standard

From Materials to Devices: Your Total Solutions Partner In Piezo Technology

Over 20 Years of R&D Excellence: Providing Next-Gen End-to-End Piezo Solutions

Quintess Integrated Technology Ecosystem



The Complete Value for Your Business



R&D With Us



Application-Specific
Design



Tailored
Engineering



Quality Excellence



Global Reach

20+ Years of R&D Excellence,
Innovating **Piezo** Technology