

Cathode, Anode, Solid Electrolyte for Solid Oxide Fuel Cell (SOFC)

1. Powder
2. Printable Paste (Particle Size, Viscosity, Resin, Water, Organic Solvent) etc... as you request)
3. Pressed Disk (10 mm, 14 mm, 20 mm in diameter)
4. Oxide Material Synthesis for SOFC besides below table as customer request

Cathode	
$\text{La}_{0.7-0.8}\text{Sr}_{0.2-0.3}\text{Mn}_{1.02-1.05}\text{O}_3$	Lanthanum Strontium Manganate
$\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$	Lanthanum Strontium Cobalt Ferrite
LSM + YSZ	LSM + YSZ mixed Composite
LSCF + GDC	LSCF + GDC mixed Composite
$\text{La}_{0.6-0.8}\text{Sr}_{0.2-0.4}\text{FeO}_3$	Lanthanum Strontium Ferrite
$\text{La}_{0.6-0.7}\text{Sr}_{0.3-0.4}\text{CoO}_3$	Lanthanum Strontium Cobaltite
$\text{Sm}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$	Samarium Strontium Cobaltite
$\text{LaNi}_{0.6}\text{Fe}_{0.4}\text{O}_3$	Lanthanum Nickel Ferrite
$\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$	Barium Strontium Cobalt Ferrite
$\text{La}_{0.7}\text{Sr}_{0.3}\text{Cu}_{0.2}\text{Fe}_{0.8}\text{O}_3$	Lanthanum Strontium Copper Ferrite
$\text{La}_{1.6}\text{Sr}_{0.4}\text{NiO}_4$	Lanthanum nickelate, strontium doped
La_2NiO_4	Lanthanum nickelate
$\text{Mn}_{1.5}\text{Co}_{1.5}\text{O}_4$	Manganese cobalt oxide
Solid Electrolyte	
$(\text{Y}_2\text{O}_3)_{0.03-0.08}(\text{ZrO}_2)_{0.92-0.97}$	Yttria Stabilized Zirconia
$(\text{Y}_2\text{O}_3)(\text{Sc}_2\text{O}_3)(\text{ZrO}_2)$	Yttria and Scandia Stabilized Zirconia
$(\text{Y}_2\text{O}_3)(\text{Sc}_2\text{O}_3)(\text{Bi}_2\text{O}_3)(\text{ZrO}_2)$	Bi doped Yttria and Scandia Stabilized Zirconia
$\text{Gd}_{0.1}\text{Ce}_{0.9}\text{O}_{1.95}$	Gd doped Ceria
$\text{Sm}_{0.2}\text{Ce}_{0.8}\text{O}_{1.9}$	Sm doped Ceria
$\text{La}_{0.4}\text{Ce}_{0.6}\text{O}_{1.8}$	La doped Ceria
LSGM	Doped Lanthanum Gallate
$\text{Ce}_{0.8}\text{Pr}_{0.2}\text{O}_2$	Cerium oxide, praseodymium doped
MDLS	Magnesium or Metal doped Lanthanum Silicate
Anode	
NiO	Nickel Oxide
NiO + Solid Electrolyte	Nickel Oxide + YSZ or any type of Solid Electrolyte

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Interconnect Powders

$\text{La}_{0.7}\text{Ca}_{0.3}\text{CrO}_3$	Lanthanum Calcium Chromium Oxide
$\text{La}_{0.85}\text{Sr}_{0.35}\text{CrO}_3$	Lanthanum Strontium Chromium Oxide
$\text{La}_{0.8}\text{Ca}_{0.2}\text{Cr}_{0.9}\text{Co}_{0.1}\text{O}_3$	Lanthanum Calcium Chromium Cobalt Oxide
$\text{Y}_{0.8}\text{Ca}_{0.2}\text{Cr}_{0.9}\text{Co}_{0.1}\text{O}_3$	Yttrium Calcium Chromium Cobalt Oxide
$\text{Mn}_{1.5}\text{Co}_{1.5}\text{O}_4$	Manganate Cobalt Oxide
$\text{Sr}_{0.85}\text{Y}_{0.3}\text{Ti}_{0.05}\text{Co}_{0.05}\text{O}_3$	Strontium Yttrium Titanium Cobalt Oxide
$\text{La}_{0.4}\text{Sr}_{0.6}\text{TiO}_3$	Lanthanum Strontium Titanium Oxide

SOFC Sealant (Combination of below 1 - 4 components)

Network Former	Modifier	Intermediates	Additive
SiO_2	BaO	Al_2O_3	La_2O_3
B_2O_3	MgO		NiO
	CaO		TiO_2
	Na_2O		ZnO
	SrO		ZrO_2
			Y_2O_3

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