

ISO 11894-1:2013-04 (E)

Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for conductivity measurement of ion-conductive fine ceramics - Part 1: Oxide-ion-conducting solid electrolytes

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	2
5	Test piece	3
5.1	Shape and dimensions	3
5.2	Surface roughness	3
5.3	Density	3
5.4	Electrodes	3
5.5	Number of test piece	4
6	Test procedure	4
6.1	Measurement of cross-sectional area of a test-piece and the distance between voltage terminals	4
6.2	Conditions of testing	4
6.3	Heating of a test piece	4
6.4	Method for measurement	4
6.5	Measurement system	5
6.6	AC impedance meter	6
6.7	Lead wires	6
6.8	Preparation for measurement	7
7	Measurement	7
8	Calculation of oxide ion conductivity	7
9	Expression of oxide ion conductivity	8
9.1	Oxide ion conductivity	8
9.2	The expression of oxide ion conductivity	8
10	Test report	8