Wafer Surface Contamination

Wafer表面之超高感度汙染評估

使用DADD-ICP-MS方法進行微量金屬定量分析

300mm Wafer表面之微量金屬分析

使用先進的汙染控制技術與高感度ICP-MS方法，可以在 E+4～6atoms/cm² 檢出定量下限之規格，評估Silicon Wafer表面之微量金屬汙染。

Contamination Control

- Sample Preparation (DADD** Method)
- ▼ Removal Silicon Matrix (Heat to dryness)
- ▼ Measurement Solution Preparation
- ▼ Quantification (ICP-MS)

E+4 atoms/cm²
E+5 atoms/cm²
E+6 atoms/cm²
E+7 atoms/cm²
E+8 atoms/cm²
E+9 atoms/cm²

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	L	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn

Method Detection Limits (MDL)***

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	L	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn

Method Quantification Limits (MQL)***

* SEMI M85-1114 : GUIDE FOR THE MEASUREMENT OF TRACE METAL CONTAMINATION ON SILICON WAFER SURFACE BY ICP-MS
** DADD : Direct Acid Droplet Decomposition
*** MDL : Method Detection Limits, MQL : Method Quantification Limits, Obtained by $k \times SD/s$
k (MDL) : a coefficient (k=3 has been used in JISK0133) SD : the standard deviation of the intensity of the method blank solutions
k (MQL) : a coefficient (k=10 has been used in JISK0133) s : the slope of the calibration carve

超微量化學汙染評估

從既有的經驗與知識，獨自設計之無化學汙染無塵室，可評估超微量表面分子狀汙染物質。
(SMCs : Surface Molecular Contaminants)

< 無金屬汙染實驗室 >

< 無有機物汙染實驗室 >

< 無離子汙染實驗室 >

Your satellite laboratories.

SCAS Sumika Chemical Analysis Service