

Chapter 34

Structure of domain boundaries: metals: Ir

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See Table 34.1.

Table 34.1 Ir

Miller index	Superstructure	Major experimental techniques	Supporting experimental techniques	Sample preparation	Results	Ref.	Fig.
					Remarks		
(001)	(1 × 5)	LEED	–	Ar ⁺ ISA (500 eV/1300 K in 5 × 10 ⁻⁷ mbar O ₂)	DBs aligned parallel to (×1) direction <i>Concluded from dif-fraction peak broadening</i>	[85Hei]	
(110)	(1 × 2)	LEED	MEIS	ISA cycles (–/1200 K in 5 × 10 ⁻⁸ Torr O ₂)	High density of APDBs concluded from streaky LEED pattern	[87Cop]	

Symbols and abbreviations

Short form	Full form
LEED	low-energy electron diffraction
MEIS	medium-energy ion scattering
DB	domain boundary
APDB	antiphase domain boundary
ISA	ion sputtering and annealing

References

- [85Hei] Heinz, K., Schmidt, G., Hammer, L., Müller, K.: Phys. Rev. **B32**, 6214 (1985)
 [87Cop] Copel, M., Fenter, P., Gustafsson, T.: J. Vac. Sci. Technol. **A5**, 742 (1987)

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