

Preferred Orientation in Pyrolytic Graphite

著者	HIRAI Toshio
journal or	Science reports of the Research Institutes,
publication title	Tohoku University. Ser. A, Physics, chemistry
	and metallurgy
volume	20
page range	160-160
year	1968
URL	http://hdl.handle.net/10097/27441

ABSTRACTS OF PAPERS Published in Other Journals

Preferred Orientation in Pyrolytic Graphite*

Toshio HIRAI

The Research Institute for Iron, Steel and Other Metals

Abstract

The preferred orientation in several pyrolytic graphites prepared under various conditions was investigated by means of an X-ray technique.

Two kinds of the preferred orientation parameters were measured. A simple relationship exists between them as proposed by Fischbach. Relationships among several measures of preferred orientation in common use are discussed.

The preferred orientation of pyrolytic graphite is affected by the preparation conditions such as deposition temperature and gas pressure. The preferred orientation deteriorates at temperatures below about 2000°C and the deterioration becomes marked at low temperatures under higher gas pressure. The method employed in the present work is in principle applicable to measurements of the preferred orientation of other vapor deposited materials.

^{*} The 1385th report of the Research Institute for Iron, Steel and Other Metals. Published in the Transactions of the Japan Institute of Metals, 8 (1967), 190.