

1. Record Nr.	UNINA9910805667003321
Autore	Ruess Tobias
Titolo	First 2 MW-Class (136)/170/204 GHz Multi-Frequency Gyrotron Pre-Prototype for DEMO: Design, Construction and Key Components Verification // Tobias Ruess
Pubbl/distr/stampa	Karlsruhe : , : KIT Scientific Publishing, , 2023
Descrizione fisica	1 online resource
Collana	Karlsruher forschungsberichte aus dem Institut für Hochleistungsimpuls- und Mikrowellentechnik, , 2192-2764 ; ; band 18
Disciplina	621.381336
Soggetti	Electron tubes Gyrotrons Vacuum-tubes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"A gyrotron is used in magnetically confined plasma experiments for heating, current drive, plasma stabilization and plasma diagnostics. This work presents the first design and construction of a multi-frequency / multi-purpose coaxial-cavity pre-prototype gyrotron operating at (136)/170/204 GHz with an output power of 2 MW. It is the first step towards operating frequencies up to 240 GHz using the coaxial-cavity gyrotron technology."