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Terminology of electromagnetic metamaterials

电磁超材料术语

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This standard by the national metamaterial technology and products Standardization Technical Committee Electromagnetic (SAC/TC545) proposed.

This standard by the national electromagnetic metamaterial technology and products Standardization Technical Committee (SAC/TC545) centralized.

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Electromagnetic metamaterials term

1 Scope

This standard specifies the terms and definitions electromagnetic metamaterials categories, features, design, substrate, application and other related aspects.

This standard applies to electromagnetic metamaterials used in research, teaching, production, engineering and other fields, and other aspects related to electromagnetic metamaterials can be Reference.

2.1.1 Metamaterial metamaterials

A specialty composite structures or by physical size of the key material orderly structure design, conventional materials do not get it

Possess extraordinary physical properties.

2.1.2 Electromagnetic metamaterials electromagneticmetamaterials

With extraordinary electromagnetic properties of metamaterials.

2.1.3 Microwave metamaterials microwavemetamaterials

Metamaterials at microwave frequencies.

2.1.4 Millimeter wave metamaterial millimetermicrowavemetamaterials

Metamaterial millimeter wave band.

Left-handed metamaterials (double negative material) left-handedmetamaterials

In particular electromagnetic spectrum, which is equivalent to the real part of the effective permittivity and permeability are negative metamaterial.

2.1.6 EBG electromagneticbandgapstructures

Artificial periodic structure of electromagnetic waves of different frequency bands selective cutoff characteristic arrangement.

2.1.7 Zero index metamaterial zerorefractiveindexmetamaterials

The equivalent refractive index of the metamaterial zero.

2.1.8 Graded-index metamaterial gradientrefractiveindexmetamaterials

Equivalent refractive index in a direction along a certain metamaterials.

2.1.9 Dispersive metamaterial dispersivemetamaterials

Varies with frequency, the effective electromagnetic parameters may vary depending on design requirements metamaterial.