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STUDY OF EQUIPMENT AND METHODS FOR MEASURING OPTICAL-MAGNETIC AND MAGNETO-OPTICAL PROPERTIES OF RARE EARTH IONS

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ABSTRACT

This article analyzes the study of optical, magneto-optical properties of rare earth ions. The velocity of ion movement, the magnetic optics of radiant 4f-4f transitions in garnets of rare earth elements are described in detail. The results of the research can be widely applied in the field of quantum electronics, optoelectronics, microelectronics, physical physics optics.

KEYWORDS

Rare earth ions, crystal lattice, optical properties, quantum jumps, magnetotechnics, multiples, electromagnetic, garnet, zesman, dispersion, zeyman effect.

Introduction

About the radiation-excited electron states of rare earth ions, the width of the fluorescent corridor is important for the case of the Zeyman split. Observation of the incident is largely effective. The basic state of the ions of rare earth elements is a quasse duplicate and the main multiplet is agitated. When the magnetization of the NYE system is calculated at a low temperature, it corresponds to the two-state System magnetization.

From Wikipedia, the free encyclopedia Kabel (disambiguation), a disambiguation page with the Netherlands Kabel (disambiguation) Jump to search
Retrieved 2015-07-07. When light returns or is absorbed from such materials (in a strong magnetic field), new spectral series, Landau spectra, appears. Jump to search Jump to search Kabel Kabbalah, a hamlet in the Netherlands Therefore, the transparent ferrite and antiferromagnetics are used in laser beam manipulation, electronic-computing machines and others. Kabel (disambiguation)

Missing elements in Mendeleev's table.

1. Magnetoptics and Information Technology.

Magneto-optics is the direction of optical spectroscopy concerned with the study of energy exchange processes between magnetic matter and electron radiation. The relevance of magnetooptics is primarily due to the diminution and increase in the information density of elementary measurements with magnetic memory, and secondly, the emerging direction is related to spinotropics. With the help of magneto-optical methods, it is possible to determine the energetic structure of the rare earth element

premese, that is, the centers of the mixture, and the main mechanisms of interaction of magnetic ions with the external field and light radiation.

Rare Elements - Rare Elements - A conventional name for elements that are very rare in the Earth's layer. They consist of about 45 metals. Ingredients: lithium (Li), rubidium (Rb), cesium (Cs), beryllium (Be), radium (Ra), gallium (Ga), indium (In), thallium (TI), germanium (Ge), vanadium (V), niobium (Nb), tantalum (Ta), selenium (Se), tellurium (Te), polonium (Ro), molybdenum (Mo), tungsten (W), rhenium (Re), scandium (Sc), yttrium (Y), lanthanum (La), and 14 lanthanides, actinium (As), thorium (Tp), protactinium (Ra), uranium (U), and inert gases. Rare elements are relatively new or relatively poorly mastered. This disambiguation page lists articles associated with the Disambiguation page. Mas is a titan who was once considered "rare." Jump to search All rare elements make up 0.2% of the Earth's crust by mass. This disambiguation page lists articles associated with the title Disambiguation. Jump to search Mas is found in group 1 with rare earth elements such as Li, Rb, Cs of group III, Se, Y, group IV, Ge with Zr, group V with Nb Ta, and group IV element Mo with W.

Retrieved 2010-07-12. Coal mined from the Angren deposit contains elements gallium, germanium, vanadium, molybdenum, rhenium. At the Kalmakyr metal deposit in Almalyk, there are rare elements such as molybdenum and rhenium. Since these elements are found in such small quantities, effective methods and technologies for their enrichment and isolation have not yet been developed. Uranium and other actinoid elements are present in the areas belonging to the Kyzyl-Kumnodirmetallolzolot. Currently, only uranium compounds are extracted on an industrial scale.

2. Elementar zarralar.

Regarding the structure of elementary particles, the fact that particles that are components of complex systems are called "elementary" implies that they can be broken down into components. If a particle is eroded into a particle, it cannot be said that the products of nu destruction exist in the form of components in the absorbing particle.

3. Fundamentals of magnetooptics.

Most magneto-optic effects are directly or approached in the external magnetic field The division of the system's energy layers is the result of decomposition. A direct split appears in the Zeyman effect. All other magneto-optic effects are the result of the Zesman effect and are bound by the polarization properties of optical transitions and the laws of propagation of light electromagnetic waves in a medium with dispersion.

NYE is the energy spectrum of ions.

The energy range from the primary multiplet to the first excited multiplet of NYE ions is 10^{-3} cm^{-1}. In the crystalline lattice of the garnet, NYE is an ion, which forms oxygen ions in addition to the ion.

The law of movement of ions.

Since the inhabitants of the electric charge in solutions are ions, the electrical conductivity of the solutions is directly proportional to the candensation of ions. The speed at which an ion moves depends on its nature, field strength, candensation, viscosity of the medium in motion, and so on.

Energy of ions and types of ionization.

The ionization process of malecules that are targeted by the action of heat energy is called thermoionization. In this case, the charge transport of ionized malecules is converted into positive ions.

Conclusion

NYE – serves new fields in quantum electronics, optoelectronics, microelectronics, cryoelectronics resulting from the differentiation of optical magnetic and magneto-optical properties of radio electronics.

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