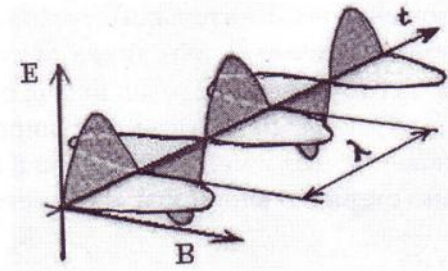


?

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( . 1).

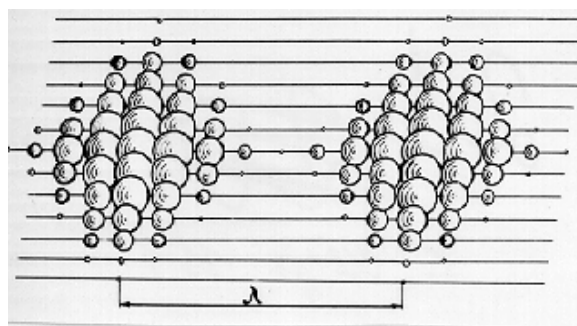


. 1.

?

( . 1)

( . 2) [1], [2], [3].



. 2.

$\lambda$

( . 1),

( . 2).

( . 2).

« ... » - 1973.

( .2),

-1 ( .3).



.3. -1 :

-1

( .1).

-1 ( .3), 100 30

$$\lambda = v/\nu = 3 \cdot 10^8 / 5 \cdot 10^3 = 0,6 \cdot 10^5 = 60$$

( .2),

( .1).

( .2),

( )

[1], [2].

$I$ ,

( .4),

$\bar{h}$

( .4) [1], [2].

( .4).

?

0,01

0,001

$$\rho_{BS} = 0,001 / 2\pi \cdot r = 0,001 / 6,28 \cdot 0,01 = 0,016$$

( -

)

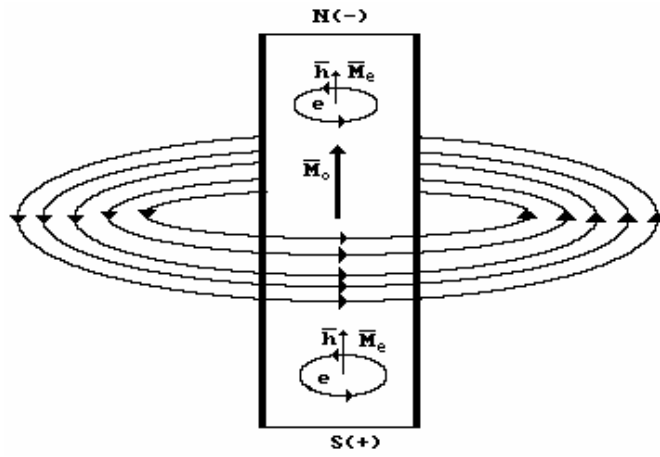
r

$$\rho_{BR} = 0,016 / 6,28 \cdot 10^9 = 2,55 \cdot 10^{-11} \text{ / .}$$

$10^{10}$

( . 2),

( . 1),



. 4.

(S +)

(N -)

),

0

[1], [2].

( . 2 - )

15

[1], [2].

( . 2)

( . 2)

( . 2)

[1], [2].

. 5

e

$\Delta \vec{M}_e$ ,

.2.

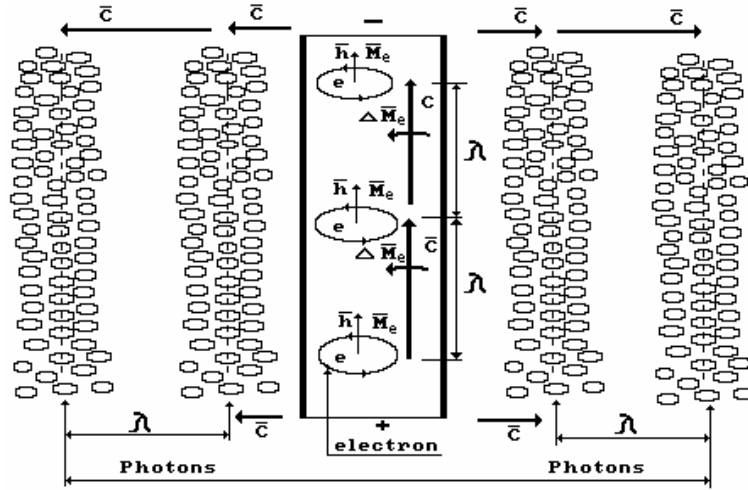
$$8,2 \cdot 10^{22}$$

(.5).

$$\omega_e = \frac{m_e \omega_e}{e} = \frac{\hbar \bar{M}_e}{4\pi \cdot M_e} = \frac{E_e}{4\pi \cdot M_e}, \quad (1)$$

$\omega_e$  -

;  $E_e$  -



.5.

$e$

$$M_e \cdot \omega_e$$

$$\Delta \bar{M}_e$$

$$\Delta \omega_e \quad (.5).$$

$$(.2)$$

(.5).

$$\lambda_{20} = \frac{C'}{T} = \frac{2,898 \cdot 10^{-3}}{273,15 + 20} = 9,886 \cdot 10^{-6} \quad (2)$$

( . 2, 5)

$$(0,5 / 1 \cdot 10^{-9}) = 5,0 \cdot 10^{10}$$

$10^{-9}$  , 0,5 ,  $\lambda$

Hz

<http://www.eh-antenna.net/teo.htm>

I,

I

$$U = U_0 \cos \varphi; \quad (3)$$

$$I = I_0 \sin \varphi; \quad (4)$$

$$H = H_0 \sin \varphi. \quad (5)$$

[1], [5].

2. . . . . 2-
  2008. 675 .
  3. . . . . , 2008. 71 .
  4. . . . . 2. .: « »
  1987. 383 .
  5. . . . , . . . . . - 1962 . 392 .
  6. . . . . ?
- <http://ehant.qrz.ru/katya.htm>