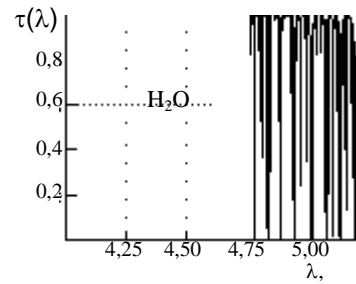
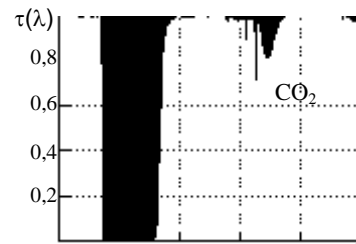
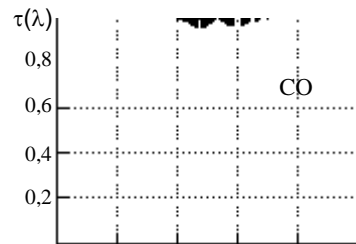




[1, 2]

CO  
H<sub>2</sub>O 20 %  
CO<sub>2</sub> 10 %  
373



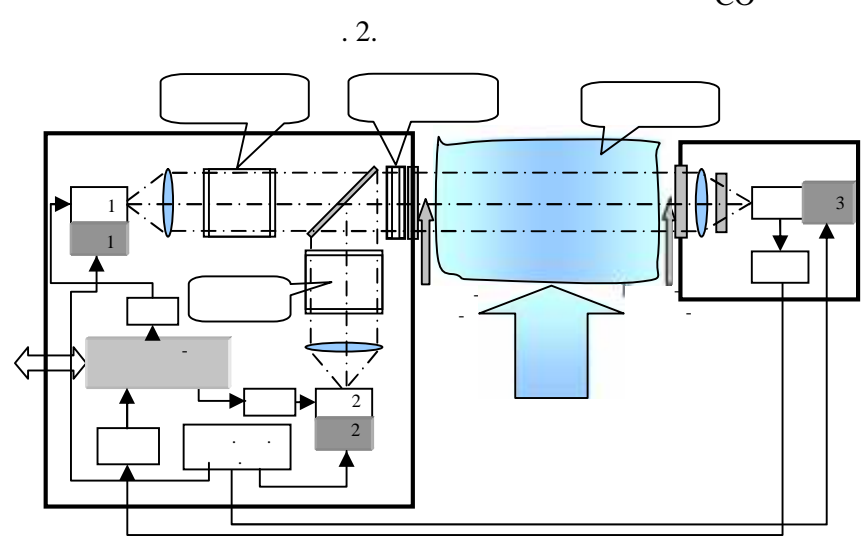
. I.

. 1

CO<sub>2</sub> H<sub>2</sub>O CO 10<sup>-3</sup> %

HITRAN.  
1

[3, 4],



.2. CO: -

CO, .3.

CO



;  $k(\lambda) = \dots$  ;  $l = \dots$

$u_1 = u_2$  ;

$$u_1 = A_1 \int_{\lambda_1}^{\lambda_2} \tau(\lambda) \Phi_{k_1}(\lambda) \exp[-k(\lambda)(p_{k_1} l_{k_1} + p l) - k(\lambda) p l] d\lambda; \quad (3)$$

$$u_2 = A_2 \int_{\lambda_1}^{\lambda_2} \tau(\lambda) \Phi_{k_2}(\lambda) \exp[-k(\lambda)(p_{k_2} l_{k_2} + p l) - k(\lambda) p l] d\lambda,$$

$\tau_1 = \tau_{k_1} \tau_1 \tau_{0k}$ ;  $\tau_2 = \tau_{k_2} \tau_2 \tau_{0k}$ ;  $\tau(\lambda) = \dots$

$$A_1 = \int_{\lambda_1}^{\lambda_2} \Phi_1(\lambda) d\lambda =$$

$$= A_2 = \int_{\lambda_1}^{\lambda_2} \Phi_2(\lambda) d\lambda = A,$$

$\tau_1(\lambda), \tau_2(\lambda)$  ;  $\lambda_1 - \lambda_2$

$$p = \frac{1}{l} \frac{\int_{\lambda_1}^{\lambda_2} \tau(\lambda) \tau(\lambda) \exp[-k(\lambda) p_{k_2} l_2] d\lambda - \frac{u_2}{u_1} B}{\int_{\lambda_1}^{\lambda_2} \tau(\lambda) \tau(\lambda) k(\lambda) d\lambda}, \quad (4)$$

$$\tau(\lambda) = \exp[-k(\lambda) p l], \quad B = \int_{\lambda_1}^{\lambda_2} \tau(\lambda) \tau(\lambda) \exp[-k(\lambda) p_{k_1} l_1] d\lambda.$$

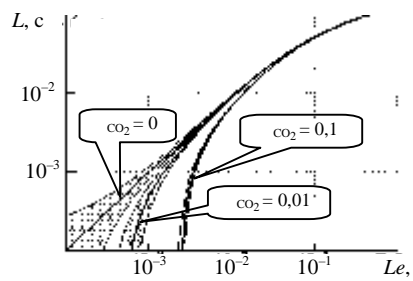
$\tau(\lambda),$

$u_2/u_1.$

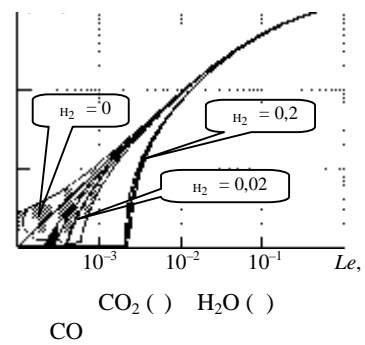
CO<sub>2</sub> H<sub>2</sub>O

CO

$10^{-9}$   
 CO  
 (100 ),  
 50  
 CO<sub>2</sub> H<sub>2</sub>O  
 : 1) CO<sub>2</sub>  
 H<sub>2</sub>O 10 %  
 CO  
 $10^{-4}$   
 CO  
 0,1 %,



. 4.



CO<sub>2</sub> ( ) H<sub>2</sub>O ( )  
CO

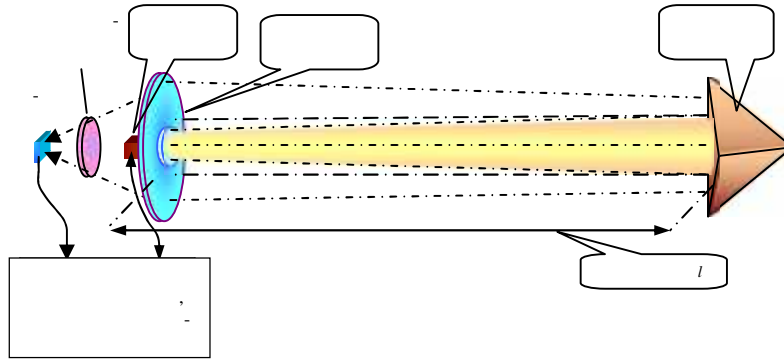
[1].  
 CO,  
 4,6 ,  
 . 5  
 1,56 ,  
 CO.

l .

[5].

$$\Delta_{\min} / l = 5 \cdot 10^{-4}$$

CO 0,01 % , 400 ° ,



.5.

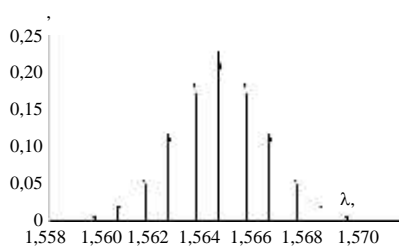
) CO

.6

CO

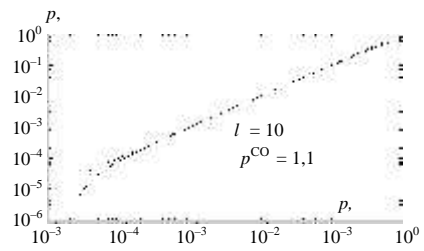
$l$  [5] CO  $p^{\text{CO}}$ ,

5



.6. -

CO



; -

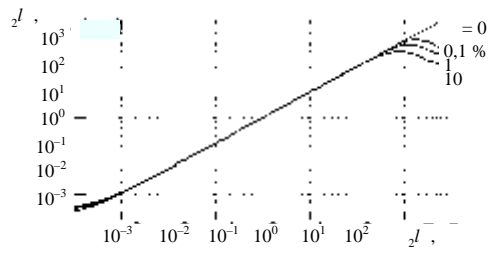
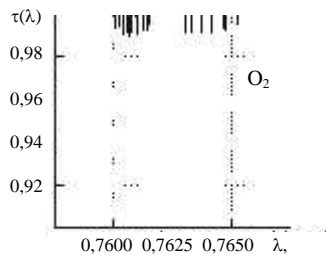
0,76 ,

( . 7 ).

$10^{-4}$

1

1 %, [5].  
 ( 1 . m ) O<sub>2</sub>



. 7.

O<sub>2</sub> l

4,6 CO,

1. .- .: , 1986. - 318 . / . . . , . . . , . . .
2. .- .: , 1990. - . 7-38. :
3. .- .: , 1984. - 53 . ( 336/ . . . )
4. .- .: , 1990. - 34 . ( 614/ . . . )
5. .- .: // .- 2001. - 4, . 68. - . 520-525.

28.05.2004