

613.155:537.568.011.57

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*The changes of aeroionic composition of air in production areas with the conditioners of different constructions are investigated. The functions of dynamics of aeroions concentrations depending on the height of building and on the length of fresh air duct are determined. Recommendations for the methods of normalization of aeroionic composition of air are given.*

*Key words: ionization, conditioning, ventilation.*

[1, 2].

( ),

[3, 4].

) ( ) [5], ( [6, 7]

[8]

[9] –

, [8]. , , , ( , )

[10]

( ) ( 3 ). , 40 %.

15-20

300-500

( . , . ) . 1. 0,05, -0,03 ( -0,05 0,05).

( $n^- - 600^{-3}$ ,  $n^+ - 400^{-3}$ ).

1.

	$n^-$	$n^+$	$n^-$	$n^+$
1	390	130	480	480
2	310	120	540	460
3	470	40	500	490
4	400	90	530	480
5	310	140	550	510
6	400	110	530	590
7	290	110	550	460
8	420	140	530	560
9	290	70	550	510
10	310	150	480	480
11	260	60	550	540
12	220	140	620	580
13	330	120	660	600
14	330	160	680	650
15	440	230	620	560
$n$	345	120	560	530

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2.

	, <sup>-3</sup>			, <sup>-3</sup>		
	$n^-$	$n^+$		$n^-$	$n^+$	
1	510	620	0,10	490	360	-0,15
2	630	740	0,08	420	480	0,07

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$$\frac{\partial n}{\partial t} = g - D \left( \frac{\partial^2 n}{\partial x^2} \right) + \frac{n - n_0}{X} + \frac{\partial n}{\partial x} V,$$

$\frac{\partial n}{\partial t}$  — ;  $g$  — ;  
 $D$  — ;  $n_0$  — ; —  
 ;  $V$  — ;  $X$  —

$$\frac{\partial n}{\partial t} = 0,$$

$(g, n_0, V)$  ,  $(D, X)$  ,  $D = 10^{-5} \text{ cm}^2/\text{s}$  —  
 ,  $1 \cdot 10^3$  ,  $1,2 \cdot 10^2$  ,  $1,2$  .

1.

2.

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3.

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4.

- 1. . . . / . . . . - ∴ ,1999-716 .
- 2. . . . / . . . . - ∴ ,1963.-353 .
- 3. . . . / . . . . , . . . . - ∴ ,1988-168 .
- 4. . . . : / . . . . - ∴ ,1980.-168 .

5. *Influence of air humidity and the distance from the source on negative air ion concentration in outdoor air* / C. C. Wu, G. W. Lee, S. Yang at all // *Science of the Total Environment*. - 2006. - V. 370. - P. 245-253.

- 6. . . . / . . . . // . - 2009. - .54. - .206-209.
- 7. . . . / . . . . , . . . . // . - 2009. - .74. - .41-47.
- 8. . . . / . . . . , . . . . // . - 2007. - .49. - .198-211.
- 9. . . . / . . . . // . - 2010. - .19. - .123-127.
- 10. . . . / . . . . , . . . . // . - 2011. - .20. - .66-70.

24.10.2011 .

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