

1.

[1].

1.1.

[2, 3].

1.2.

[4, 5];

1.3.

(

).

1.4.

(50% 80%)

[6].

1.5.

;

(-100-200),

[7, 8, 9, 10].

1.6.

[11].

1.7.

[12, 13, 14].

1.8.

;

()

[3, 15, 16, 17, 18, 22-24].

1.9.

(

)

[17].

1.10.

(

).

2.

2.1.

: - ;

[19].

2.2.

2.3.

:

(

5(50

(

$d_{ep} \approx 27 \text{ МКОМ}$);

-5:

+

4

" "

+

() +

+

) [20].

2.4.

-

:

(95%

) [21];

2.5.

[29, 30].

3.

(

)

-

,

;

(

).

3.1.

(

).

-

-

(- -).

$$A + \begin{matrix} k_1 \\ \rightarrow \\ 2x \\ \leftarrow \\ k_1^- \end{matrix} ; B + x \begin{matrix} k_2 \\ \rightarrow \\ C \end{matrix}$$

\dot{x}

$$\frac{dx}{dt} = k_1 Ax - k_1^- x^2 - k_2 Bx \quad (3.1)$$

(- -)

$$\frac{\partial P(x,t)}{\partial t} = -\frac{\partial}{\partial x} [(k_1 Ax - k_1^- x^2 - k_2 Bx)P(x,t)] + \frac{1}{2} S \frac{\partial^2 P(x,t)}{\partial x^2} \quad (3.2)$$

3.2.

():

$$x_{j+1} = \mu x_j (1 - x_j) - \quad , \quad x_j = A \Delta C_j + D, \quad \Delta t -$$

$$\mu \quad (\quad) .$$

3.3.

4.

[25-27],

$$+ + + (4.1)$$

),

$$\bar{F}(z),$$

$$\bar{\Psi}(z) = 0,$$

;)

:)

$$\bar{z}_{\min} \leq \bar{z} \leq \bar{z}_{\max},$$

$$\max(\min) \quad \bar{F}(\bar{x}, \bar{y}, \bar{T}, \bar{K}, \bar{H}, \bar{M}), \quad (4.2)$$

$$\begin{cases} \bar{\Psi}(z) = \bar{\Psi}(\bar{x}, \bar{y}, \bar{T}, \bar{K}, \bar{H}, \bar{M}) = 0 \\ z_{\min} \leq z \leq z_{\max} \end{cases} \quad (4.3)$$

$$\begin{aligned} \bar{F} &= \bar{F}(f_1, f_2, \dots, f_n) & - & & ; \\ \bar{\psi} &= \bar{\psi}(\psi_1, \psi_2, \dots, \psi_k) & - & & ; \\ & \dots & & & ; \bar{z} - \\ & & & & ; \bar{x}, \bar{y} - & ; \bar{T} - \\ & & & & ; \bar{K} - \\ & & & & ; \bar{H} - \\ & ; \bar{M} - & & & \end{aligned} \quad (4.2) - (4.3)$$

$$\begin{aligned} \bar{\psi}(\bar{z}) &= 0 & & & \bar{\psi}(\bar{z}) = 0. \\ (4.2)-(4.3), & & (4.1). & & (4.2) - (4.3), \\ & & \bar{\psi}(\bar{z}) = 0, & & \end{aligned}$$

- 4.1.) [14];
- 4.2.) [17].
- 4.3.) [28].
- 4.4.) ("ψ"

5.

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[2]

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[5] // "

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