

$$\begin{aligned}
 254 - 0 &= 2,3891 - 2,3359 = 0,0532 > 0,0030; \\
 254 - 163 &= 2,3891 - 2,3771 = 0,0120 > 0,0029; \\
 163 - 0 &= 2,3771 - 2,3359 = 0,0412 > 0,0029.
 \end{aligned}$$

SAE 10W-40,

$$0,3 \cdot 10^{-3}$$

: 1. 6581 - 75.
 01.01.88. 2.

3.

. 1978

25.09.06.

543.062: 621.1

• • , • • , ” ”,
 • • , • • ,

Theoretical prerequisites for creation of gas sensors sensitive elements applied to control general components of environmental gas media have been analyzed. Sensitive elements classification based on methods of response formation, selectivity and period of operation has been performed. Work hypothesis for sensitive elements sensitivity increase by means of new mesoscopic, oxide and metal materials utilization have been formulated.

[1 – 7],

WO_3 , SnO_2 , ZnO , n_2O_3

300-800

[8].

[10 – 12].

	-	-	H ₂	O ₂	CO	CO ₂	NO	NO ₂	C _m H _n	H ₂ S	H ₂ O	NH ₃
<i>I</i>												
1.1. - -												
Pd SiO ₂ Si	+	+	+				+	+				+
Pt SiO ₂ Si			+									
Ru SiO ₂ Si			+									
Ir SiO ₂ Si			+									
Pd SiC Si			+									
1.2. - -												
SnO ₂ SiO ₂ Si	+										+	+
1.3. -												
Pd Si			+									
Pd SnO ₂			+	+	+							
Pd TiO ₂			+									
Pt SnO ₂								+				
Pt TiO ₂				+	+		+					
:	GaAs, ZnO ₂ , SiO ₂ .											

1.4.												
PbS Si			+									
WO ₃ Si							+					
CuO ZnO			+		+				+		+	
La ₂ CuO ZnO			+		+						+	
CuO SnO ₂										+		
1.5.												
SnO ₂ (M) Si			+		+			+		+		
Fe ₂ O ₃ (Au)					+			+				
Fe ₂ O ₃ (Zn)					+			+				
2.												
SnO ₂								NO _x	C ₆ H ₆	+		
SnO ₂ (LaO _x)						+						
ZnO	+					+						
												+
Na ₂ Ti ₃ O ₇ - LaSrMnO _x				+								
Pt WO ₃ Si							+					
MO _x ()	+		+	+	+	+		NO _x	+	+	+	+
									+			

10-100

(SnO₂, ZnO)

[13]

- / / (-);
- / ();
- / / ;
- / .

· , , , -
 · ,
 : 1 / 2 / .

· , · -
 : ,

· / / ·
 / · -
 (Pt, Pd).

· , · -
 M/SiO₂, ,

M/SiO₂ · - ,

· , [14, 15].

· , , , [16, 17].

Ru [18].

/ / SnO₂/SiO₂/Si, -
 / / (SnO₂), -
 : - (Si₂) [19].
 - / - (Si,
)
 GaAs) (SnO₂, ZnO, 2).
 (20-30 Å) - SiO₂.
 (, Pd₂Si),
 ,
 (O₂, CO, NO).
 ,
 .
 - .
 .
 Pd/SnO_x 2, CO, H₂ -
 -
 C-U U.
 Pt, Ag/SnO_x .
 Pd/SnO_x
 CO.
 Pt/TiO₂.
 ,
 2 .
 Pd/TiO₂/n-Si 2 .
 2. Pt/SnO₂ [20],
 (ppb) NO₂.
 ,
 NO₂.
 / .
 / -
 -
 ,

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20.07.06

1 , , ,	3
2 , , TIB ₂ ,	7
3 ,	12
4 , , , , ,	19
5	23
6 , , , , , , N-(1-)-N- N-(1-)-N-	32
7 , , , , ,	42
8	48