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Supporting Information

Bimetallic catalysts for the Fischer-Tropsch reaction

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Table 1

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Table 2

In this table are summarized the testing conditions and the main test figures (activity and selectivity) of all the catalysts mentioned in the review.

Missing figures in the tables were not provided in the reviewed papers by the authors.

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Table 1: Catalyst preparation details

Entry	Catalyst	Surface area; crystallite size	Preparation Method [#]	Precursors, solvent, synthesis temperature	Drying Temperature (°C)/ time (h)	Calcination Temperature (°C)/ time (h)	Reduction Temperature (°C)/ time (h)	Phase	Reference
1	10%Fe/TiO ₂		a	Nitrates, H ₂ O, r.t.	110/4	300/4	400/2	Fe + Fe ₃ O ₄	21
2	10%Co/TiO ₂		a	Nitrates, H ₂ O, r.t.	110/4	300/4	400/2		21
3	10% _{(75)Fe₂₅Co} /TiO ₂		a	Nitrates, H ₂ O, r.t.	110/4	300/4	400/2	Metal	21
4	10% _{(50)Fe₅₀Co} /TiO ₂		a	Nitrates, H ₂ O, r.t.	110/4	300/4	400/2	Metal	21
5	10% _{(25)Fe₇₅Co} /TiO ₂		a	Nitrates, H ₂ O, r.t.	110/4	300/4	400/2	Metal	21
6	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
7	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31
8	4,87% _{(80)Fe₂₀Co} /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31
9	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
10	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31
11	4,87% _{(80)Fe₂₀Co} /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31

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Entry	Catalyst	Surface area; crystallite size	Preparation Method [#]	Precursors, solvent, synthesis temperature	Drying Temperature (°C)/ time (h)	Calcination Temperature (°C)/ time (h)	Reduction Temperature (°C)/ time (h)	Phase	24
12	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
13	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31
14	4,87% _(80Fe₂₀Co) /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31
15	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
16	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31
17	4,87% _(80Fe₂₀Co) /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31
18	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
19	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31
20	4,87% _(80Fe₂₀Co) /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31
21	4,94%Fe/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc, ε' χ Carbide (FT)	31
22	4,61%Co/silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	bcc	31

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Table 1: Catalyst preparation details

Entry	Catalyst	Surface area; crystallite size	Preparation Method [#]	Precursors, solvent, synthesis temperature	Drying Temperature (°C)/ time (h)	Calcination Temperature (°C)/ time (h)	Reduction Temperature (°C)/ time (h)	Phase	24
23	4,87% _(80Fe₂₀Co) /silica		a	Nitrates, H ₂ O, r.t.	125/18	200/2; 450/4	425/24	fcc, hcp	31
24	10,9%Fe/ZrO ₂	82,5 m ² /g	b	Nitrates, H ₂ O, r.t.	60/24	500/ 6	430/16	Zirconia	24
25	11,2% _(78Fe₂₂Co) /ZrO ₂	85,0 m ² /g	a,b	Nitrates, H ₂ O, r.t.	60/24	500/ 6	430/16	Zirconia	24
26	9,63% _(49Fe₅₁Co) /ZrO ₂	83,1 m ² /g	a,b	Nitrates, H ₂ O, r.t.	60/24	500/ 6	430/16	Zirconia + CoO + Fe ₂ O ₃	24
27	12,47% _(30Fe₇₀Co) /ZrO ₂	52,5 m ² /g	a,b	Nitrates, H ₂ O, r.t.	60/24	500/ 6	430/16	Zirconia + CoO + Fe ₂ O ₃	24
28	10,5%Fe/ZrO ₂	49,4 m ² /g	a,b	Nitrates, H ₂ O, r.t.	60/24	500/ 6	430/16	Zirconia + Cobalt oxide	24
29	_(30Fe₇₀Co_{1,99}S) /ZrO ₂	148 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	350/3	430/16	Zirconia + CoO + Fe ₂ O ₃	24
30	_(30Fe₇₀Co_{1,87}S) /ZrO ₂	107 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	450/3	430/16	Zirconia + CoO + Fe ₂ O ₃	24
31	_(30Fe₇₀Co_{1,81}S) /ZrO ₂	92 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	550/3	430/16	Zirconia + CoO + Fe ₂ O ₃	24
32	_(30Fe₇₀Co_{1,94}S) /ZrO ₂	99 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	650/1	430/16	Zirconia + CoO + Fe ₂ O ₃	24
33	_(30Fe₇₀Co_{1,59}S) /ZrO ₂	80 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	650/ 2	430/16	Zirconia + CoO + Fe ₂ O ₃	24

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Table 1: Catalyst preparation details

Entry	Catalyst	Surface area; crystallite size	Preparation Method [#]	Precursors, solvent, synthesis temperature	Drying Temperature (°C)/ time (h)	Calcination Temperature (°C)/ time (h)	Reduction Temperature (°C)/ time (h)	Phase	Reference
34	(₃₀ Fe ₇₀ Co _{1,49} S)/ZrO ₂	88 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	650/3	430/16	Zirconia + CoO + Fe ₂ O ₃	24
35	(₃₀ Fe ₇₀ Co _{1,29} S)/ZrO ₂	87 m ² /g	a,b	Nitrates, H ₂ SO ₄ , H ₂ O, r.t.	110/16	650/4	430/16	Zirconia + CoO + Fe ₂ O ₃	24
36	4,94%Fe/HZSM-5	6,0 nm	a	Nitrates, H ₂ O	100/overnight		425/24		25
37	4.94%Fe/HY	7,5 nm	a	Nitrates, H ₂ O	100/overnight		425/24		25
38	4,60%Co/HZSM-5		a	Nitrates, H ₂ O	100/overnight		425/24		25
39	4,61%Co/HY		a	Nitrates, H ₂ O	100/overnight		425/24		25
40	4.94%Fe/ZSM		a	Nitrates, H ₂ O	100/overnight		425/24		25
41	3%Fe/Y		c	Nitrates, H ₂ O	100/overnight		425/24		25
42	4,86%(₇₉ Fe ₂₁ Co)/HZSM-5	7,8 nm	a	Nitrates, H ₂ O	100/overnight		425/24	Alloy	25
43	4,87%(₇₉ Fe ₂₁ Co)/HY	7,8 nm	a	Nitrates, H ₂ O	100/overnight		425/24	No alloy	25
53	4,10%Co/carbon black	1,8 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9

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Table 1: Catalyst preparation details

Entry	Catalyst	Surface area; crystallite size	Preparation Method [#]	Precursors, solvent, synthesis temperature	Drying Temperature (°C)/ time (h)	Calcination Temperature (°C)/ time (h)	Reduction Temperature (°C)/ time (h)	Phase	Reference
54	3,20% _{(25)Fe₇₅Co} /carbon black	1,3 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9
55	2,00% _{(27)Fe₇₃Co} /carbon black	18,7 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9
56	1,70% _{(34)Fe₆₆Co} /carbon black	1,7 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9
57	2,00% _{(56)Fe₄₄Co} /carbon black	4,7 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9
58	4,40%Fe/carbon black	1,1 nm	a	Carbonyls, THF or Acetone, r.t.			200/5		9
75	4,20% _{(35,7)Fe_{35,7}Co_{28,6}K} /carbon black	2,9 nm	a	Carbonyls, THF or Acetone, r.t.			400/16		9
76	_{(50)Fe₅₀Co}	2,9 m ² /g; 0,16 mm	d	Oxides			300/72		9
77	_{(50)Fe₅₀Co}	2,9 m ² /g; 0,16 mm	d	Oxides			300/72		9
78	_{(50)Fe₅₀Co}	2,9 m ² /g; 0,16 mm	d	Oxides			300/72		9
79	10% _{(50)Fe₅₀Co} /TiO ₂	45 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		9
80	10% _{(50)Fe₅₀Co_{0,08}K} /TiO ₂	49 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		9

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81	10% _{(50Fe₅₀Co_{0.47}K)/TiO₂}	53 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		9
82	10% _{(50Fe₅₀Co_{1.13}K)/TiO₂}	53 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		9
83	10% _{(50Fe₅₀Co_{0.09}Cr)/TiO₂}	55 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		9
84	10% _{(50Fe₅₀Co_{0.6}Cr)/TiO₂}	50 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
85	10% _{(50Fe₅₀Co_{1.04}Cr)/TiO₂}	49 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
86	10% _{(50Fe₅₀Co_{0.07}Mn)/TiO₂}	47 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
87	10% _{(50Fe₅₀Co_{0.45}Mn)/TiO₂}	45 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
88	10% _{(50Fe₅₀Co_{0.97}Mn)/TiO₂}	46 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
89	10%Fe/TiO ₂	48 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
90	10% _{(75Fe₂₅Co)/TiO₂}	-	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
91	10% _{(50Fe₅₀Co)/TiO₂}	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13

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92	10% ₍₂₅₎ Fe ₇₅ Co)/TiO ₂	-	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
93	10%Co/TiO ₂	47 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
94	8% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
95	6% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
96	4% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
97	2% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
98	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
99	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
100	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
101	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
102	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13

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103	10% ₍₅₀₎ Fe ₅₀ Co/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
104	10% ₍₅₀₎ Fe ₅₀ Co/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
105	10% ₍₅₀₎ Fe ₅₀ Co/TiO ₂	51 m ² /g	a	Nitrates, H ₂ O, 80°C	120/ 2	200/16	300/16		13
106	₈₃ Fe ₁₇ Co		b, e	oxides, H ₂ O	140/16	500/5	400/24	α-Fe ₂ O ₃ MnO ₂ Mn ₃ O ₄ Co ₃ O ₄	*
107	₇₇ Fe ₁₅ Co ₈ Mn		b, e	oxides, H ₂ O	140/16	500/5	400/24	α-Fe ₂ O ₃ MnO ₂ Mn ₃ O ₄ Co ₃ O ₄	*
108	₇₁ Fe _{14,5} Co _{14,5} Mn		b, e	oxides, H ₂ O	140/16	500/5	400/24	α-Fe ₂ O ₃ MnO ₂ Mn ₃ O ₄ Co ₃ O ₄	*
109	₅₉ Fe ₁₂ Co ₂₉ Mn		b, e	oxides, H ₂ O	140/16	500/5	400/24	α-Fe ₂ O ₃ MnO ₂ Mn ₃ O ₄ Co ₃ O ₄	*
110	₄₅ Fe ₁₀ Co ₄₅ Mn		b, e	oxides, H ₂ O	140/16	500/5	400/24	α-Fe ₂ O ₃ MnO ₂ Mn ₃ O ₄ Co ₃ O ₄	*
111	7,9% ₍₂₄₎ Fe ₇₆ Co/SiO ₂		a	Hydridic Carbonyl, Acetone, 30- 40°C	dried in vacuum		200	FeCo ₃ cluster	18
112	7,9% ₍₂₄₎ Fe ₇₆ Co/SiO ₂		a	Hydridic Carbonyl, Acetone, 30- 40°C	dried in vacuum		200	FeCo ₃ cluster	18
113	7,9% ₍₂₄₎ Fe ₇₆ Co/SiO ₂		a	Hydridic Carbonyl, Acetone, 30- 40°C	dried in vacuum		200	FeCo ₃ cluster	18

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114	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	51,0 m ² /g	a	Nitrates, H ₂ O, 80°C	120/16	200/16	300		48
115	10%Fe/TiO ₂	86,6 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	270		48
116	10%Co/TiO ₂	83,8 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	270		48
117	20% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	78,3 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	270		48
118	20% ₍₂₅₎ Fe ₇₅ Co)/TiO ₂	87,4 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	-		48
119	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	76,0 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	270		48
120	15% ₍₃₃₎ Fe ₆₇ Co)/TiO ₂	86,0 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	-		48
121	15% ₍₆₇₎ Fe ₃₃ Co)/TiO ₂	87,1 m ² /g	b	Nitrates, H ₂ O, 80°C	120/16	none	-		48
122	10%Fe/TiO ₂	43,5 m ² /g	a	Carbonyls, THF, r.t.	dried in vacuum for 16 h	none	250		48
123	10%Co/TiO ₂	47,2 m ² /g	a	Carbonyls, THF, r.t.	dried in vacuum for 16 h	none	250		48
124	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	48,7 m ² /g	a	Carbonyls, THF, r.t.	dried in vacuum for 16 h	none	250		48
125	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	47,8 m ² /g	a	Mixed Carbonyl, THF, r.t.	dried in vacuum for 16 h	none	250		48

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126	10%Co/SiO ₂	21 nm	a	Nitrates, H ₂ O, r.t.	120/16	500/2	500/2		10
127	11% _{(9)Fe₉₁Co} /SiO ₂	21 nm	a	Nitrates, H ₂ O, r.t.	120/16	500/2	500/2		10
128	15% _{(33)Fe₆₇Co} /SiO ₂	14 nm	a	Nitrates, H ₂ O, r.t.	120/16	500/2	500/2		10
129	10,00%Co/CNT	192	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35
130	10,5% _{(5)Fe₉₅Co} /CNT	188	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35
131	11% _{(9)Fe₉₁Co} /CNT	184	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35
132	12% _{(17)Fe₈₃Co} /CNT	166	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35
133	14% _{(28)Fe₇₂Co} /CNT	156	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35
134	10%Fe/CNT	194	a	Nitrates, H ₂ O, r.t.	120/16	350/3	400/20		35

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 1: Catalyst preparation details

*) S. L. Gonzales-Cortes, S. M. A. Rodulfo-Baechler, A. Oliveros, J. Orozco, B. Fontal, A. J. Mora, G. Delgado, *React. Kinet. Catal. Lett.* **2002**, 75, 3.

a) Incipient impregnation

b) Co-precipitation

c) Impregnation

d) Plasma spraying

e) Co-impregnation

Supporting Information
Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
1	10%Fe/TiO ₂	250°C	1 MPa	1.9	10 g*h/mol	2.2%				C ₆₊ % = 8		21
2	10%Co/TiO ₂	250°C	1 MPa	1.9	10 g*h/mol	20.3%				C ₆₊ % = 24		21
3	10%(₇₅ Fe ₂₅ Co)/TiO ₂	250°C	1 MPa	1.9	10 g*h/mol	5.9%				C ₆₊ % = 30		21
4	10%(₅₀ Fe ₅₀ Co)/TiO ₂	250°C	1 MPa	1.9	10 g*h/mol	28.5%				C ₆₊ % = 41		21
5	10%(₂₅ Fe ₇₅ Co)/TiO ₂	250°C	1 MPa	1.9	10 g*h/mol	14.5%				C ₆₊ % = 32		21
6	4,94%Fe/silica	250°C	1 atm	3				9*10 ⁻³	mol/site*s			31
7	4,61%Co/silica	250°C	1 atm	3				45*10 ⁻³	mol/site*s			31
8	4,87%(₈₀ Fe ₂₀ Co)/silica	250°C	1 atm	3				1,7*10 ⁻³	mol/site*s			31
9	4,94%Fe/silica	250°C	7,8 atm	3				70,2*10 ⁻³	mol/site*s			31
10	4,61%Co/silica	250°C	7,8 atm	3				13,8*10 ⁻³	mol/site*s			31
11	4,87%(₈₀ Fe ₂₀ Co)/silica	250°C	7,8 atm	3				13,3*10 ⁻³	mol/site*s			31
12	4,94%Fe/silica	250°C	14 atm	3				46*10 ⁻³	mol/site*s			31
13	4,61%Co/silica	250°C	14 atm	3				24,8*10 ⁻³	mol/site*s			31
14	4,87%(₈₀ Fe ₂₀ Co)/silica	250°C	14 atm	3				23,8*10 ⁻³	mol/site*s			31
15	4,94%Fe/silica	250°C	1 atm	1				3,2*10 ⁻³	mol/site*s			31
16	4,61%Co/silica	250°C	1 atm	1				17*10 ⁻³	mol/site*s			31

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
18	4,94%Fe/silica	250°C	7,8 atm	1				21,8*10 ⁻³	mol/site*s			31
19	4,61%Co/silica	250°C	7,8 atm	1				9*10 ⁻³	mol/site*s			31
20	4,87% _(80Fe₂₀Co) /silica	250°C	7,8 atm	1				10*10 ⁻³	mol/site*s			31
21	4,94%Fe/silica	250°C	14 atm	1				47,6*10 ⁻³	mol/site*s			31
22	4,61%Co/silica	250°C	14 atm	1				-	mol/site*s			31
23	4,87% _(80Fe₂₀Co) /silica	250°C	14 atm	1				10,6*10 ⁻³	mol/site*s			31
24	10,9%Fe/ZrO ₂	250°C	1 atm	-	5 h ⁻¹	2.60%				C ₅₊ = 24 wt% C ₁ = 23 wt%		24
25	11,2% _(78Fe₂₂Co) /ZrO ₂	250°C	1 atm	-	5 h ⁻¹	2.50%				C ₅₊ = 26 wt% C ₁ = 25 wt%		24
26	9,63% _(49Fe₅₁Co) /ZrO ₂	250°C	1 atm	-	5 h ⁻¹	3.00%				C ₅₊ = 32 wt% C ₁ = 19 wt%		24
27	12,47% _(30Fe₇₀Co) /ZrO ₂	250°C	1 atm	-	5 h ⁻¹	3.50%				C ₅₊ = 33 wt% C ₁ = 20 wt%		24
28	10,5%Fe/ZrO ₂	250°C	1 atm	-	5 h ⁻¹	3.30%				C ₅₊ = 35 wt% C ₁ = 21 wt%		24

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
29	(₃₀ Fe ₇₀ Co _{1,99} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	3.90%				C ₅₊ = 44,2 wt% C ₄ = 15,9 wt% C ₁ = 14,8 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
30	(₃₀ Fe ₇₀ Co _{1,87} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	4.20%				C ₅₊ = 43,3 wt% C ₄ = 18,1 wt% C ₁ = 16,7 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
31	(₃₀ Fe ₇₀ Co _{1,81} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	4.50%				C ₅₊ = 33,3 wt% C ₄ = 19,1 wt% C ₁ = 21,9 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
32	(₃₀ Fe ₇₀ Co _{1,94} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	3.90%				C ₅₊ = 28,5 wt% C ₄ = 25,5 wt% C ₁ = 20,8 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
33	(₃₀ Fe ₇₀ Co _{1,59} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	4.30%				C ₅₊ = 23,7 wt% C ₄ = 31,6 wt% C ₁ = 16,6 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
34	(₃₀ Fe ₇₀ Co _{1,49} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	4.00%				C ₅₊ = 28,2 wt% C ₄ = 27,3 wt% C ₁ = 19,9 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
35	(₃₀ Fe ₇₀ Co _{1,29} S)/ZrO ₂	150°C	1 atm		5 h ⁻¹	4.10%				C ₅₊ = 36,0 wt% C ₄ = 23,4 wt% C ₁ = 17,6 wt%	Double consecutive reactors: 1-Fe-Co-ZrO ₂ 2-SO ₄ ²⁻ /ZrO ₂	24
36	4,94%Fe/HZSM-5	250°C	1 atm	1		3.00%				CO ₂ = 28,7 % CH _n = 26,1 % C ₁ = 44,9 % C ₅₊ = 9,6 % C ₅₊ ⁼ = 12,3 %		25
37	4.94%Fe/HY	250°C	1 atm	1		3.00%				CO ₂ = 22,2 % CH _n = 24,9 % C ₁ = 52,3 % C ₅₊ = 17,5 % C ₅₊ ⁼ = 0 %		25

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
38	4,60%Co/HZSM-5	250°C	1 atm	1		3.00%				CO ₂ = 10,0 % CH _n = 32,4 % C ₁ = 52,0 % C ₅₊ = 9,0 % C ₅₊ ⁼ = 10,4 %		25
39	4,61%Co/HY	250°C	1 atm	1		3.00%				CO ₂ = 6,4 % CH _n = 29,2 % C ₁ = 57,1 % C ₅₊ = 11,4 % C ₅₊ ⁼ = 0 %		25
40	4.94%Fe/ZSM	250°C	1 atm	1		3.00%				CO ₂ = 28,5 % CH _n = 28,8 % C ₁ = 40,7 % C ₅₊ = 9,7 % C ₅₊ ⁼ = 16,4 %		25

Supporting Information
Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
41	3%Fe/Y	250°C	1 atm	1		3.00%				CO ₂ = 16,2 % CH _n = 28,4 % C ₁ = 52,6 % C ₅₊ = 6,8 % C ₅₊ ⁼ = 0 %		25
42	4,86% _(79Fe₂₁Co) /HZSM-5	250°C	1 atm	1		3.00%				CO ₂ = 19,5 % CH _n = 27,9 % C ₁ = 48,7 % C ₅₊ = 9,4 % C ₅₊ ⁼ = 10,7 %		25
43	4,87% _(79Fe₂₁Co) /HY	250°C	1 atm	1		3.00%				CO ₂ = 25,4 % CH _n = 24,4 % C ₁ = 51,4 % C ₅₊ = 14,9 % C ₅₊ ⁼ = 0 %		25

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
53*	4,10%Co/carbon black	225°C	101 KPa	3		14.50%	1,25 μmol CO/(s g cat.)	4.21E-03		CH _n = 6,5 % C ₁ = 91,6 %		9
54	3,20% _(25Fe75Co) /carbon black	225°C	101 KPa	3		4.40%	0.41	1.26E-03		CH _n = 6,6 % C ₁ = 86,1 %		9
55	2,00% _(27Fe73Co) /carbon black	225°C	101 KPa	3		1.60%	0.12	9.18E-03		CH _n = 5,0 % C ₁ = 92,1 %		9
56	1,70% _(34Fe66Co) /carbon black	225°C	101 KPa	3		1.60%	0.16	1.21E-03		CH _n = 5,4 % C ₁ = 73,5 %		9
57	2,00% _(56Fe44Co) /carbon black	225°C	101 KPa	3		3.00%	0.22	4.06E-03		CH _n = 7,2 % C ₁ = 84,4 %		9
58	4,40%Fe/carbon black	225°C	101 KPa	3		2.00%	0.11	2.10E-04		CH _n = 5,2 % C ₁ = 44,2 %		9
75	4,20% _(35,7Fe35,7Co28,6K) /carbon black	275°C	101 KPa	3		4.50%	0.16	2.20E-03		CH _n = 3,3 % C ₁ = 28,5 %		9
76	_(50Fe50Co)	250°C	0,69 MPa		139 μm/s	72.0%				C ₁ = 21,85 % C ₅₊ = 41,1		9

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
77	(₅₀ Fe ₅₀ Co)	260°C	0,69 MPa		139 μm/s	95.5%				C ₁ = 23,1 % C ₅₊ = 36,8 %		9
78	(₅₀ Fe ₅₀ Co)	275°C	0,69 MPa		139 μm/s	97.5%				C ₁ = 23,9% C ₅₊ = 34,2 %		9
79	10%(₅₀ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	2	350 h ⁻¹	34.2%	0.381		6.15E-02	C ₁ = 13 % C ₂₋₄ = 12 % C ₅₊ = 75 %	Run time = 200 h	9
80	10%(₅₀ Fe ₅₀ Co _{0,08} K)/TiO ₂	220°C	10 bar	2	350 h ⁻¹	38.8%	0.442		8.04E-02	C ₁ = 9 % C ₂₋₄ = 10 % C ₅₊ = 81 %	Run time = 200 h	9
81	10%(₅₀ Fe ₅₀ Co _{0,47} K)/TiO ₂	220°C	10 bar	2	350 h ⁻¹	28.7%	0.575		1.25E-01	C ₁ = 10 % C ₂₋₄ = 19 % C ₅₊ = 71 %	Run time = 200 h	9
82	10%(₅₀ Fe ₅₀ Co _{1,13} K)/TiO ₂	220°C	10 bar	2	350 h ⁻¹	25.8%	0.239		5.98E-02	C ₁ = 8 % C ₂₋₄ = 12 % C ₅₊ = 80 %	Run time = 200 h	9

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
83	10% _{(50Fe₅₀Co_{0,09}Cr)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	39.6%	0.481			C ₁ = 11 % C _{2,4} = 12 % C ₅₊ = 77 %	Run time = 200 h	9
84	10% _{(50Fe₅₀Co_{0,6}Cr)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	37.4%	0.436		7.15E-02	C ₁ = 9 % C _{2,4} = 9 % C ₅₊ = 82 %	Run time = 200 h	13
85	10% _{(50Fe₅₀Co_{1,04}Cr)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	31.4%	0.339		6.16E-02	C ₁ = 11 % C _{2,4} = 13 % C ₅₊ = 76 %	Run time = 200 h	13
86	10% _{(50Fe₅₀Co_{0,07}Mn)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	32.3%	0.35		3.24E-02	C ₁ = 10 % C _{2,4} = 14 % C ₅₊ = 76 %	Run time = 200 h	13
87	10% _{(50Fe₅₀Co_{0,45}Mn)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	31.6%	0.331		2.81E-02	C ₁ = 9 % C _{2,4} = 12 % C ₅₊ = 79 %	Run time = 200 h	13

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
88	10% _{(50Fe₅₀Co_{0,97}Mn)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	25.6%	0.242		2.78E-02	C ₁ = 13 % C _{2,4} = 14 % C ₅₊ = 72 %	Run time = 200 h	13
89	10%Fe/TiO ₂	220°C	10 bar	2	350 h ⁻¹	11.40%	0.1		1.92E-02	C ₁ = 27,2% C _{2,4} = 72,8 % C ₅₊ = 0 %		13
90	10% _{(75Fe₂₅Co)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	18.30%	0.17		1.55E-02	C ₁ = 18,9 % C _{2,4} = 45,9 % C ₅₊ = 34,7 %	Paraffin =68,5 % Olefin = 26,9 %	13
91	10% _{(50Fe₅₀Co)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	36.30%	0.4		7.00E-02	C ₁ = 11 % C _{2,4} = 14,6 % C ₅₊ = 74,2 %	Paraffin =82,9 % Olefin = 15,8 %	13
92	10% _{(25Fe₇₅Co)/TiO₂}	220°C	10 bar	2	350 h ⁻¹	30.90%	0.34		3.74E-02	C ₁ = 20,9 % C _{2,4} = 14,5 % C ₅₊ = 64,2 %		13

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
93	10%Co/TiO ₂	220°C	10 bar	2	350 h ⁻¹	63.90%	1.15		2.26E-01	C ₁ = 14,4 % C _{2,4} = 9,3 % C ₅₊ = 76,1 %		13
94	8% _{(50)Fe₅₀Co} /TiO ₂	220°C	10 bar	2	350 h ⁻¹	30.80%	0.34		4.66E-02	C ₁ = 11,4 % C _{2,4} = 14,5 % C ₅₊ = 73,8 %		13
95	6% _{(50)Fe₅₀Co} /TiO ₂	220°C	10 bar	2	350 h ⁻¹	25.40%	0.28		4.24E-02	C ₁ = 10,5 % C _{2,4} = 12,6 % C ₅₊ = 76,8 %		13
96	4% _{(50)Fe₅₀Co} /TiO ₂	220°C	10 bar	2	350 h ⁻¹	15.80%	0.17		2.27E-02	C ₁ = 11,0 % C _{2,4} = 14,1 % C ₅₊ = 74,3 %		13
97	2% _{(50)Fe₅₀Co} /TiO ₂	220°C	10 bar	2	350 h ⁻¹	10.50%	0.11		1.86E-02	C ₁ = 9,0 % C _{2,4} = 19,5 % C ₅₊ = 72,6 %		13

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
98	10% _(50Fe₅₀Co) /TiO ₂	220°C	2 bar	2	350 h ⁻¹	17.70%	0.131			C ₁ = 16,7 % C ₂₋₄ = 26,6 % C ₅₊ = 56,4 %	Paraffin =65,3 % Olefin = 33,5 %	13
99	10% _(50Fe₅₀Co) /TiO ₂	220°C	5 bar	2	350 h ⁻¹	28.30%	0.278			C ₁ = 19,1 % C ₂₋₄ = 28,3 % C ₅₊ = 52,4 %	Paraffin =19,1 % Olefin = 28,3 %	13
100	10% _(50Fe₅₀Co) /TiO ₂	255°C	10 bar	2	350 h ⁻¹	72.60%	0.964			C ₁ = 41,6 % C ₂₋₄ = 24,3 % C ₅₊ = 33,6 %	Paraffin =82,6 % Olefin = 16,6 %	13
101	10% _(50Fe₅₀Co) /TiO ₂	310°C	10 bar	2	350 h ⁻¹	90.30%	1,014			C ₁ = 52,4 % C ₂₋₄ = 29,1 % C ₅₊ = 17,8 %	Paraffin =78,9 % Olefin = 20,0 %	13
102	10% _(50Fe₅₀Co) /TiO ₂	220°C	10 bar	2	1140 h ⁻¹	15.90%	0.589			C ₁ = 23,9 % C ₂₋₄ = 23,0 % C ₅₊ = 52,7 %	Paraffin =57,8 % Olefin = 41,1 %	13

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
103	10%(₅₀ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	2	500 h ⁻¹	23.60%	0.378			C ₁ = 24,4 % C ₂₋₄ = 25,2 % C ₅₊ = 50,2 %	Paraffin =59,6 % Olefin = 39,7 %	13
104	10%(₅₀ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	1	350 h ⁻¹	12.10%	0.167			C ₁ = 13,2 % C ₂₋₄ = 28,4 % C ₅₊ = 57,9 %	Paraffin =41,5 % Olefin = 57 %	13
105	10%(₅₀ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	0.5	350 h ⁻¹	7.10%	0.125			C ₁ = 8,6 % C ₂₋₄ = 19,6 % C ₅₊ = 71,3 %	Paraffin =28,4 % Olefin = 70,1 %	13
106	₈₃ Fe ₁₇ Co	300°C	0,1 Mpa	1	300 h ⁻¹	26.00%				C ₁ = 54,0 % O/P = 0,7		*
107	₇₇ Fe ₁₅ Co ₈ Mn	300°C	0,1 Mpa	1	300 h ⁻¹	53.10%				C ₁ = 85,4 % O/P = 0,8		*
108	₇₁ Fe _{14,5} Co _{14,5} Mn	300°C	0,1 Mpa	1	300 h ⁻¹	60.00%				C ₁ = 60,0 % O/P = 1,3		*

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
109	$_{59}\text{Fe}_{12}\text{Co}_{29}\text{Mn}$	300°C	0,1 Mpa	1	300 h ⁻¹	36.00%				C ₁ = 76,7 % O/P = 0,7		*
110	$_{45}\text{Fe}_{10}\text{Co}_{45}\text{Mn}$	300°C	0,1 Mpa	1	300 h ⁻¹	25.40%				C ₁ = 81,8 % O/P = 0,6		*
111	7,9% _(24Fe₇₆Co) /SiO ₂	240°C	1 bar	1	500 h ⁻¹	20.00%				C ₁ = 12,5 % C ₅₊ = 71 %	6 = 15 % High Olefine content (95%	18
112	7,9% _(24Fe₇₆Co) /SiO ₂	240°C	20 bar	1	500 h ⁻¹					C ₁ = 32,4 % C ₅₊ = 50 %	C ₅ = 11 % High Olefine content	18
113	7,9% _(24Fe₇₆Co) /SiO ₂	240°C	40 bar	1	500 h ⁻¹	40.00%				C ₁ = 35,6 % C ₅₊ = 33 %	C ₃ = 16 % High Olefine content	18
114	10% _(50Fe₅₀Co) /TiO ₂	270°C	10 bar	2	350 h ⁻¹							48
115	10%Fe/TiO ₂	270°C	10 bar	2	350 h ⁻¹	15.80%	0.18		36	C ₁ = 9,3 % C ₅₊ = 64,5 %		48
116	10%Co/TiO ₂	270°C	10 bar	2	350 h ⁻¹	22.50%	0.37		49.3	C ₁ = 7,8 % C ₅₊ = 84,8 %		48

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Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
117	20% ₍₅₀₎ Fe ₅₀ Co/TiO ₂	270°C	10 bar	2	350 h-1	21.80%	0.33		71.7	C1 = 19,6 % C5+ = 49,1 %		48
118	20% ₍₂₅₎ Fe ₇₅ Co/TiO ₂	270°C	10 bar	2	350 h-1	29.90%	0.55		-	C1 = 18,4 % C5+ = 67,7 %		48
119	10% ₍₅₀₎ Fe ₅₀ Co/TiO ₂	270°C	10 bar	2	350 h-1	17.10%	0.24		44.4	C1 = 17,0 % C5+ = 69,5 %		48
120	15% ₍₃₃₎ Fe ₆₇ Co/TiO ₂	270°C	10 bar	2	350 h-1	17.40%	0.27		-	C1 = 13,1 % C5+ = 70,3 %		48
121	15% ₍₆₇₎ Fe ₃₃ Co/TiO ₂	270°C	10 bar	2	350 h-1	15.40%	0.2		-	C1 = 22,8 % C5+ = 44,2 %		48
122	10%Fe/TiO ₂	220°C	10 bar	2	350 h-1	16.10%	0.13		43.3	C1 = 9,2 % C5+ = 66,2 %		48
123	10%Co/TiO ₂	220°C	10 bar	2	350 h-1	67.40%	1.16		89.2	C1 = 15,6 % C5+ = 73,4 %		48

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Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
124	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	2	350 h-1	36.20%	0.41		51.3	C1 = 9,8 % C5+ = 66,5 %		48
125	10% ₍₅₀₎ Fe ₅₀ Co)/TiO ₂	220°C	10 bar	2	350 h-1	36.20%	0.35		83.3	C1 = 9,1 % C5+ = 81,2 %		48
126 [#]	10%Co/SiO ₂	230°C	20 bar	2		28.00%				C1 = 22 % C5+ = 65 %		10
127	11% ₍₉₎ Fe ₉₁ Co)/SiO ₂	230°C	20 bar	2		11.00%				C1 = 23 % C5+ = 55 %		10
128	15% ₍₃₃₎ Fe ₆₇ Co)/SiO ₂	230°C	20 bar	2		10.00%				C1 = 35 % C5+ = 41 %		10
129	10,00%Co/CNT	220°C	2 MPa	2	30 mL/min	48.00%				C1 = 9,3 % C5+ = 85,1 %	Alcohols% = 2,3	35
130	10,5% ₍₅₎ Fe ₉₅ Co)/CNT	220°C	2 MPa	2	30 mL/min	54.00%				C1 = 9,4 % C5+ = 85 %	Alcohols% = 4,1	35
131	11% ₍₉₎ Fe ₉₁ Co)/CNT	220°C	2 MPa	2	30 mL/min	49.00%				C1 = 9,5 % C5+ = 83 %	Alcohols% = 5,4	35

Supporting Information
Bimetallic catalysts for the Fischer-Tropsch reaction

Table 2: Catalyst testing details

Entry	Catalyst	Evaluation Conditions				Activity				Selectivity	Remarks	Reference
		Temperature	Pressure	H ₂ /CO	Flow rate/ Contact time	CO Conversion	Specific activity	TOF	TON			
132	12%(¹⁷ Fe ₈₃ Co)/CNT	220°C	2 MPa	2	30 mL/min	32.00%				C1 = 11,2 % C5+ = 78 %	Alcohols% = 22	35
133	14%(²⁸ Fe ₇₂ Co)/CNT	220°C	2 MPa	2	30 mL/min	30.00%				C1 = 12,3 % C5+ = 71 %	Alcohols% = 26,3	35
134	10%Fe/CNT	220°C	2 MPa	2	30 mL/min	10.00%				C1 = 16,9% C5+ = 46,7 %	Alcohols% = 10,3	35

*) S. L. Gonzales-Cortes, S. M. A. Rodulfo-Baechler, A. Oliveros, J. Orozco, B. Fontal, A. J. Mora, G. Delgado, *React. Kinet. Catal. Lett.* **2002**, 75, 3.

a) Incipient impregnation

b) Co-precipitation

c) Impregnation

d) Plasma spraying

e) Co-impregnation