Vladimir Mordkovich

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Carbon Nanofibers: A New Ultrahigh-Strength Material for Chemical Technology. Theoretical Foundations of Chemical Engineering, 2003, 37, 429-438.	0.7	92
2	Intercalation into carbon nanotubes. Carbon, 1996, 34, 1301-1303.	10.3	59
3	Discovery and Optimization of New ZnO-Based Phosphors Using a Combinatorial Method. Advanced Functional Materials, 2003, 13, 519-524.	14.9	56
4	The Observation of Large Concentric Shell Fullerenes and Fullerene-like Nanoparticles in Laser Pyrolysis Carbon Blacks. Chemistry of Materials, 2000, 12, 2813-2818.	6.7	54
5	Synthesis of ultrahard fullerite with a catalytic 3D polymerization reaction of C60. Carbon, 2014, 76, 250-256.	10.3	50
6	The role of zeolite in the Fischerâ€"Tropsch synthesis over cobaltâ€"zeolite catalysts. Russian Chemical Reviews, 2015, 84, 1176-1189.	6.5	49
7	Magnetotransport in bundles of intercalated carbon nanotubes. Physical Review B, 1997, 56, 2161-2165.	3.2	47
8	Synthesis and XPS investigation of superdense lithium-graphite intercalation compound, LiC2. Synthetic Metals, 1996, 80, 243-247.	3.9	44
9	Synthesis of carbon nanotubes by catalytic conversion of methane: Competition between active components of catalyst. Carbon, 2007, 45, 62-69.	10.3	37
10	The observation of multiwall fullerenes in thermally treated laser pyrolysis carbon blacks. Carbon, 1999, 37, 1855-1858.	10.3	32
11	Resonant Angular Oscillation of Magnetoresistance in Synthetic Layered Metal: Stage 2 SbCl5-Intercalated Graphite. Journal of the Physical Society of Japan, 1994, 63, 1643-1646.	1.6	30
12	Potassium-oxygen graphite intercalation compounds. Synthetic Metals, 1994, 68, 79-83.	3.9	29
13	Laboratory and pilot plant fixed-bed reactors for Fischerâ€"Tropsch synthesis: Mathematical modeling and experimental investigation. Chemical Engineering Science, 2015, 138, 1-8.	3.8	27
14	Intercalation into carbon nanotubes without breaking the tubular structure. Synthetic Metals, 1997, 86, 2049-2050.	3.9	26
15	Four Generations of Technology for Production of Synthetic Liquid Fuel Bbased on Fischer â€" Tropsch Synthesis. Historical Overvie. Kataliz V Promyshlennosti, 2015, 15, 23-45.	0.3	22
16	Degradation of LaNi5 by thermobaric cycling in hydrogen and hydrogen-nitrogen mixture. International Journal of Hydrogen Energy, 1990, 15, 723-726.	7.1	20
17	Longer Carbon Nanotubes by Controlled Catalytic Growth in the Presence of Water Vapor. Fullerenes Nanotubes and Carbon Nanostructures, 2012, 20, 411-418.	2.1	19
18	Fischerâ€"Tropsch synthesis on cobalt-based catalysts with different thermally conductive additives. Applied Catalysis A: General, 2015, 505, 260-266.	4.3	19

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19	The unexpected stability of multiwall nanotubes under high pressure and shear deformation. Applied Physics Letters, 2016, 109, .	3.3	19
20	Nanostructure of laser pyrolysis carbon blacks: observation of multiwall fullerenes. Solid State Sciences, 2000, 2, 347-353.	0.7	18
21	Field-induced evaporation of carbon nanotubes. Applied Physics A: Materials Science and Processing, 2001, 73, 301-304.	2.3	18
22	Scaled-up process for producing longer carbon nanotubes and carbon cotton by macro-spools. Diamond and Related Materials, 2018, 83, 15-20.	3.9	18
23	Multishell fullerenes by laser vaporization of composite carbonâ€"metal targets. Chemical Physics Letters, 2002, 355, 133-138.	2.6	16
24	Liquid-vapor thermodynamic equilibrium in Fischer-Tropsch synthesis products. Theoretical Foundations of Chemical Engineering, 2008, 42, 216-219.	0.7	16
25	Exfoliated graphite as a heat-conductive frame for a new pelletized Fischerâ€"Tropsch synthesis catalyst. Applied Catalysis A: General, 2020, 601, 117639.	4.3	16
26	The large-scale production of hydrogen from gas mixtures: A use for ultra-thin palladium alloy membranesâ˜†. International Journal of Hydrogen Energy, 1993, 18, 539-544.	7.1	15
27	Fischerâ€"Tropsch Synthesis in the Presence of Composite Catalysts with Different Types of Active Cobalt. Mendeleev Communications, 2013, 23, 44-45.	1.6	14
28	Efficiency of Gas-to-Liquids Technology with Different Synthesis Gas Production Methods. Industrial & Engineering Chemistry Research, 2014, 53, 2758-2763.	3.7	14
29	Formation of surface cobalt structures in SiC-supported Fischerâ€"Tropsch catalysts. RSC Advances, 2015, 5, 78586-78597.	3.6	14
30	Synthesis, Structure and Electrical Resistivity of Carbon Nanotubes Synthesized over Group VIII Metallocenes. Nanomaterials, 2020, 10, 2279.	4.1	14
31	Comparative efficiency of using hydrides in industrial processes of hydrogen recovery and compression. International Journal of Hydrogen Energy, 1993, 18, 839-842.	7.1	13
32	Three Types of Behaviour of Multiwall Carbon Nanotubes in Reactions with Intercalating Agents. Molecular Crystals and Liquid Crystals, 2000, 340, 775-780.	0.3	13
33	Synthesis of multishell fullerenes by laser vaporization of composite carbon targets. Physics of the Solid State, 2002, 44, 603-606.	0.6	13
34	Effect of introduced zeolite on the Fischerâ€"Tropsch synthesis over a cobalt catalyst. Mendeleev Communications, 2014, 24, 316-318.	1.6	13
35	Soot Formation in the Methane Partial Oxidation Process under Conditions of Partial Saturation with Water Vapor. Petroleum Chemistry, 2018, 58, 427-433.	1.4	13
36	Zeolites as a tool for intensification of mass transfer on the surface of a cobalt Fischerâ€"Tropsch synthesis catalyst. Catalysis Today, 2021, 378, 140-148.	4.4	12

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37	Modeling of hydrodynamics in microchannel reactor for Fischerâ€“Tropsch synthesis. International Journal of Heat and Mass Transfer, 2012, 55, 1695-1708.	4.8	11
38	Effect of Zeolite on Fischerâ€“Tropsch Synthesis in the Presence of a Catalyst Based on Skeletal Cobalt. Petroleum Chemistry, 2020, 60, 69-74.	1.4	11
39	Model for constitution of graphite intercalation compounds. Synthetic Metals, 1994, 63, 1-6.	3.9	10
40	Metallic conductivity in bundles ofFeCl3-intercalated multiwall carbon nanotubes. Physical Review B, 1998, 57, 15629-15632.	3.2	10
41	The structure and activity of Pt6 particles in ZSM-5 type zeolites. Catalysis Today, 2009, 144, 273-277.	4.4	10
42	Simulation of fluid dynamics in a microchannel Fischer-Tropsch reactor. Theoretical Foundations of Chemical Engineering, 2012, 46, 8-19.	0.7	10
43	Heat and mass transfer in Fischerâ€“Tropsch catalytic granule with localized cobalt microparticles. International Journal of Heat and Mass Transfer, 2018, 121, 1335-1349.	4.8	10
44	Formation of concentric shell carbon by homogeneous partial oxidation of methane. Chemical Physics Letters, 2018, 713, 242-246.	2.6	10
45	Quantum chemical investigation of the interaction of the Pt6 cluster with oxides of different nature. Russian Chemical Bulletin, 2007, 56, 397-406.	1.5	9
46	Shubnikov-De Haas effect and angular dependent magnetoresistance oscillations in SbCl5-intercalated graphite. Solid State Communications, 1998, 107, 165-169.	1.9	8
47	A path to larger yields of multishell fullerenes. Carbon, 2001, 39, 1938-1941.	10.3	8
48	Fabrication and characterization of thin-film phosphor combinatorial libraries. Solid State Sciences, 2002, 4, 779-782.	3.2	8
49	XPS characterization of MWCNT and C₆₀-based composites. Fullerenes Nanotubes and Carbon Nanostructures, 2016, 24, 535-540.	2.1	8
50	Effect of water on the secondary transformations of hydrocarbons in the Fischerâ€“Tropsch synthesis on Co-zeolite catalysts. Mendeleev Communications, 2017, 27, 75-77.	1.6	8
51	Effect of rhenium on Fischerâ€“Tropsch synthesis in the presence of cobaltâ€“zeolite catalysts. Petroleum Chemistry, 2017, 57, 251-256.	1.4	8
52	Catalytic 3D polymerization of C₆₀. Fullerenes Nanotubes and Carbon Nanostructures, 2018, 26, 465-470.	2.1	8
53	Irreversible high pressure phase transformation of onion-like carbon due to shell confinement. Diamond and Related Materials, 2020, 107, 107908.	3.9	8
54	Modeling the thermal and physical properties of liquid and gas mixtures of Fischerâ€“Tropsch synthesis products. Theoretical Foundations of Chemical Engineering, 2011, 45, 221-226.	0.7	7

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55	Carbon nanotube cloth for electrochemical charge storage in aqueous media. Journal of Electroanalytical Chemistry, 2018, 827, 58-63.	3.8	7
56	Natural gas partial oxidation process as a way to synthesize onion-like carbon. Fullerenes Nanotubes and Carbon Nanostructures, 2020, 28, 250-255.	2.1	7
57	Synergistic effect in Coâ€"zeolite catalyzed transformations of hydrocarbons under Fischerâ€"Tropsch conditions. Mendeleev Communications, 2020, 30, 198-201.	1.6	7
58	Superconductivity of the potassium graphite intercalation compounds. Solid State Communications, 1986, 57, 421-423.	1.9	6
59	Equilibria in the hydrogen-intermetallics systems with high dissociation pressure. Journal of Alloys and Compounds, 1995, 231, 498-502.	5.5	6
60	Successful Intercalation into Multiwall Carbon Nanotubes without Breaking Tubular Structure. Molecular Crystals and Liquid Crystals, 1998, 310, 159-164.	0.3	6
61	Polythiophene/fullerene photovoltaic cells. Synthetic Metals, 2001, 121, 1581-1582.	3.9	6
62	Influence of capillary condensation on heat and mass transfer in the grain of a Fischer-Tropsch synthesis catalyst. Theoretical Foundations of Chemical Engineering, 2010, 44, 660-664.	0.7	6
63	Thermodynamics of wax formation in the fischer-tropsch synthesis products. Theoretical Foundations of Chemical Engineering, 2013, 47, 191-200.	0.7	6
64	Composite pelletized catalyst for higher one-pass conversion and productivity in Fischerâ€"Tropsch process. Research on Chemical Intermediates, 2015, 41, 9539-9550.	2.7	6
65	Carbon nanotube cloth as a promising electrode material for flexible aqueous supercapacitors. Journal of Applied Electrochemistry, 2022, 52, 487-498.	2.9	6
66	Studies of sorption-desorption processes in the CexLa1â^'xNi5â^'H2 system by DSC. Thermochimica Acta, 1990, 160, 201-207.	2.7	5
67	New graphite intercalation compounds with heavy alkali metal superoxides. Journal of Physics and Chemistry of Solids, 1996, 57, 821-825.	4.0	5
68	Electronic structure and physical properties of potassium-oxygen-graphite intercalation compounds. Journal of Physics and Chemistry of Solids, 1996, 57, 765-769.	4.0	5
69	Prospective Ways for Production and Application of Longer Carbon Nanotubes. Fullerenes Nanotubes and Carbon Nanostructures, 2010, 18, 516-522.	2.1	5
70	LaNi5 and CexLa1â^'xNi5 changes in the course of thermobaric cycling in hydrogen and nitrogen/hydrogen mixture. International Journal of Hydrogen Energy, 1993, 18, 747-749.	7.1	4
71	Framework composition and activity of platinum-containing high-silica zeolites in n-hexane isomerization. Kinetics and Catalysis, 2009, 50, 247-254.	1.0	4
72	Substantiating the selection of recirculation circuits in technology for synthesizing liquid hydrocarbons from natural gas. Theoretical Foundations of Chemical Engineering, 2013, 47, 153-158.	0.7	4

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73	Role of zeolite in the synthesis of liquid hydrocarbons from CO and H2 on a composite cobalt catalyst. Catalysis in Industry, 2015, 7, 245-252.	0.7	4
74	Modification of carbon fiberâ€“polyurethane interface with carbon nanotubes. Materials Research Innovations, 2016, 20, 14-17.	2.3	4
75	Longer carbon nanotubes with low impurity level. Materials Today: Proceedings, 2018, 5, 25948-25950.	1.8	4
76	A Superhydrophobic Coating Based on Onion-Like Carbon Nanoparticles. Technical Physics Letters, 2020, 46, 1120-1123.	0.7	4
77	Hydrocarbon transformations on Coâ€“zeolite in catalytic environment of different redox properties at 170â€“260 Â°C. Mendeleev Communications, 2020, 30, 362-365.	1.6	4
78	Surface properties of KOX and CsOX graphite intercalation compounds. Synthetic Metals, 1997, 85, 1667-1668.	3.9	3
79	Graphite Intercalation Compound with Cesium Superoxide: XPS, UPS and STM Study. Molecular Crystals and Liquid Crystals, 1998, 310, 237-242.	0.3	3
80	Photoâ€“and cathodoluminescence in yttriumâ€“aluminiumâ€“borateâ€“based phosphors. Journal of Materials Research, 2000, 15, 2662-2666.	2.6	3
81	Niâ€“Fe Competition in the Catalysis of Carbon Nanotube Growth. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 201-206.	2.1	3
82	Structures of active sites for alkane transformations over the Pt/HZSM-5 and Pt/NaZSM-5 catalysts. Russian Chemical Bulletin, 2008, 57, 1160-1165.	1.5	3
83	Phase composition, physicochemical and catalytic properties of cobaltâ€“aluminumâ€“zeolite systems. Russian Chemical Bulletin, 2015, 64, 2371-2376.	1.5	3
84	Effect of the mode of introduction of cobalt into a composite zeolite catalyst on the product composition of Fischer-Tropsch synthesis. Petroleum Chemistry, 2015, 55, 45-50.	1.4	3
85	Cubic and tetragonal maghemite formation inside carbon nanotubes under chemical vapor deposition process conditions. Fullerenes Nanotubes and Carbon Nanostructures, 2020, 28, 913-918.	2.1	3
86	Role of Zeolites in Heat and Mass Transfer in Pelletized Multifunctional Cobalt-Based Fischerâ€“Tropsch Catalysts. Kinetics and Catalysis, 2022, 63, 321-329.	1.0	3
87	DTA as a method of studying chemical reactions at high pressures. Thermochimica Acta, 1987, 113, 233-241.	2.7	2
88	Equilibria in CexLa1âˆ’xNi5âˆ’yAly-H2 systems at subcritical and supercritical parameters. Journal of Alloys and Compounds, 1992, 187, 9-15.	5.5	2
89	Synthesis of new cesiumî—¸oxygen graphite intercalation compounds. Journal of Alloys and Compounds, 1995, 226, L1-L2.	5.5	2
90	Angular dependent magnetoresistance oscillations in SbCl5-intercalated graphite. Journal of Physics and Chemistry of Solids, 1996, 57, 761-763.	4.0	2

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91	Magneto-oscillatory behavior of carbon nanotube bundles. Synthetic Metals, 1997, 86, 2001-2002.	3.9	2
92	Polymer-based nanocomposites for bolometric applications. Technical Physics Letters, 2004, 30, 663-665.	0.7	2
93	Formation of Various Carbon Nanoclusters from Laserâ€Produced Carbon Plasma. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 12, 11-16.	2.1	2
94	Structure and electrical conductivity of (La0.9Sr0.1)[(Ga1 â˜' x Crx)0.8Mg0.2]O3 â˜' Î´ (x = 0â€"0.35) solid solutions. Inorganic Materials, 2006, 42, 689-695.	0.8	2
95	Carbonization of heavy residues of different origin. Petroleum Chemistry, 2007, 47, 288-298.	1.4	2
96	Unstable Thermal Modes in Fischer-Tropsch Reactors With Fixed Pelletized Catalytic Bed. , 2010, , .		2
97	Calculating the dynamic viscosity of paraffins using the Lee-Kesler equation. Theoretical Foundations of Chemical Engineering, 2010, 44, 448-453.	0.7	2
98	Water Concentration Influence on Catalytic Growth of Carbon Nanotubes in a Suspended Bed Reactor. Materials Research Society Symposia Proceedings, 2012, 1407, 169.	0.1	2
99	C60 fullerene decoration of carbon nanotubes. Journal of Experimental and Theoretical Physics, 2016, 123, 985-990.	0.9	2
100	Participation of Water in the Secondary Transformations of Hydrocarbons on Cobaltâ€"Zeolite Catalysts for the Fischerâ€"Tropsch Synthesis. Kinetics and Catalysis, 2017, 58, 780-792.	1.0	2
101	Carbon nanotubes by continuous growth, pulling and harvesting into big spools. Materials Today: Proceedings, 2018, 5, 25951-25955.	1.8	2
102	Fischerâ€"Tropsch Synthesis over a Cobalt Catalyst Supported on Titania-Doped Silicon Carbide. Catalysis in Industry, 2020, 12, 235-243.	0.7	2
103	Cooperative effect of cobalt and zeolite in controlling activity and stability of a catalytic Fischerâ€"Tropsch process. Applied Petrochemical Research, 2020, 10, 13-20.	1.3	2
104	CHANGES IN PHYSICAL PROPERTIES OF SUPER LONG CARBON NANOTUBES AFTER DIFFERENT METHODS OF PURIFICATION. ChemChemTech, 2018, 59, 74.	0.3	2
105	MODIFICATION OF SURFACE OF DOUBLE WALL CARBON NANO TUBES BY FULLERENE C60. ChemChemTech, 2018, 59, 12.	0.3	2
106	Cathodic deposition of manganese oxide for fabrication of hybrid recharging materials based on flexible CNT cloth. Electrochimica Acta, 2022, 412, 140131.	5.2	2
107	Creation and Study of a Model Cobalt Catalyst for High-Performance Fischerâ€"Tropsch Synthesis Using Nonporous Carbon Fiber as a Support. Kinetics and Catalysis, 2022, 63, 279-291.	1.0	2
108	New graphite intercalation compounds C4KO2 and C8KO2. Synthetic Metals, 1995, 71, 1767-1768.	3.9	1

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109	Comparative Study of Surface State and Electrochemical Properties of Tife Hydrogen Storage Alloy as Well as TiFe2 Alloy by Xps and Polarization Curves Methods. , 1998, , 353-358.		1
110	Strong Activator-Host Interaction in Rare Earth Borate Phosphors. Materials Research Society Symposia Proceedings, 1999, 560, 209.	0.1	1
111	Formation of multishell fullerenes from vaporized carbons. Molecular Crystals and Liquid Crystals, 2002, 386, 103-107.	0.9	1
112	Effect of epitaxial growth on the formation of the cobalt catalysts of the Fischer-Tropsch synthesis. Russian Chemical Bulletin, 2007, 56, 1922-1926.	1.5	1
113	Novel Flexible Composites Reinforced with CNT-Grafted Carbon Fibers. MRS Advances, 2016, 1, 1453-1458.	0.9	1
114	Fischerâ€"Tropsch synthesis with cobalt catalyst and zeolite multibed arrangement. Petroleum Chemistry, 2016, 56, 275-280.	1.4	1
115	Water-Zeolite Interfaces for Controlling Reaction Routes in Fischer- Tropsch Synthesis of Alternative Fuels. Current Catalysis, 2020, 9, 3-22.	0.5	1
116	Catalytic Conversions of Hydrocarbons over Zeolites at 170â€"260Â°C. Petroleum Chemistry, 2021, 61, 357-363.	1.4	1
117	Hydrogen sorption in LaNi4.98Al0.02-H2 at low temperatures. Thermochimica Acta, 1992, 194, 253-258.	2.7	0
118	Hydrogen Cycling-induced Phase Segregation in AB 5-Type Intermietallics. Materials Research Society Symposia Proceedings, 1998, 513, 287.	0.1	0
119	Ni-Fe Competition in the Catalytic Growth of Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
120	Catalytic decomposition of methane on impregnated carbon fiber. Solid Fuel Chemistry, 2007, 41, 307-312.	0.7	0
121	Synthesis of completely deuterated hydrocarbons. Catalysis in Industry, 2010, 2, 246-254.	0.7	0
122	Structural features of iron-containing particles inside carbon nanotubes. Materials Research Express, 2017, 4, 075053.	1.6	0
123	Fullerene-Clad Ultra-Long Carbon Nanotubes. Materials Today: Proceedings, 2017, 4, 11534-11537.	1.8	0
124	Nanostructured aluminum-matrix composite materials with controlled reactivity, modified by carbon and transition metals. Materials Today: Proceedings, 2018, 5, 26133-26139.	1.8	0
125	Method for recovery of complete molecular composition of the Fischer-Tropsch synthesis products on the basis of incomplete experimental data. Chemical Engineering Science, 2019, 197, 317-325.	3.8	0
126	ÐžÐ¡ÐžÐ'Ð•ÐÐÐžÐ¡Ð¢Ð˜ ÐšÐÐ¢ÐÐ›Ð˜Ð¢Ð˜Ð§Ð•Ð¡ÐšÐ˜Ð¥ ÐŸÐÐ•Ð'ÐÐÐ©Ð•ÐÐ˜Ð™ Ð£Ð"Ð›Ð•Ð'ÐžÐ"ÐžÐÐžÐ"ÐžÐ' ÐÐ•Ð [illegible]		

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127	Experimental Study of Fischerâ€"Tropsch Synthesis Using Nitrogen-Containing Synthesis Gas at Different Pressures of Synthesis. Catalysis in Industry, 2021, 13, 48-57.	0.7	0
128	Epoxy Nanocomposites with Carbon Nanotubes Produced by Floating Catalyst CVD. Nanomaterials, 2021, 11, 1213.	4.1	0
129	Higher Yield of Short Multiwall Carbon Nanotubes by Catalytic Growth. , 2008, , .		0
130	Intercalation into Multiwall Carbon Nanotubes: the Reaction That Distinguishes Russian Doll and Scroll Structural Types. Springer Series in Materials Science, 1998, , 107-117.	0.6	0
131	Evidence for Quantum Transport in Carbon Nanotube Bundles. Springer Series in Materials Science, 1998, , 119-124.	0.6	0
132	Experimental Study of the Fischerâ€"Tropsch Synthesis Using Nitrogen-Containing Syngas and Variable Pressure. Kataliz V Promyshlennosti, 2020, 20, 381-390.	0.3	0
133	Investigation of Structural and Physical Properties of Composite Catalyst Support with Exfoliated Graphite Additive. Advanced Materials & Technologies, 2020, , 019-024.	0.2	0
134	The Fischer â€" Tropsch synthesis with a cobalt catalyst on titania-doped silicon carbide. Kataliz V Promyshlennosti, 2020, 20, 100-109.	0.3	0
135	Electrodynamic properties of CNTs based metasurface created using 3D nano-manipulation. , 2021, , .		0
136	FEATURES OF ONION-LIKE CARBON OBTAINED IN THE PROCESS OF PARTIAL OXIDATION OF NATURAL GAS. ChemChemTech, 2021, 64, 41-47.	0.3	0
137	PREPARATION OF COMPOSITE THREADS AND HOLLOW CERAMIC FIBERS BASED ON CARBON FIBRE AND ALUMINUM OXIDE. ChemChemTech, 2021, 64, 55-59.	0.3	0