Vladimir Mordkovich

List of Publications by Year
in descending order

137 papers	1,346 citations	430874 18 h-index	434195 31 g-index
146 all docs	146 docs citations	146 times ranked	1377 citing authors

#	Article	IF	Citations
1	Carbon nanotube cloth as a promising electrode material for flexible aqueous supercapacitors. Journal of Applied Electrochemistry, 2022, 52, 487-498.	2.9	6
2	Cathodic deposition of manganese oxide for fabrication of hybrid recharging materials based on flexible CNT cloth. Electrochimica Acta, 2022, 412, 140131.	5.2	2
3	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
4	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
5	ĐžĐ¡ĐžĐ'Đ•ĐĐĐžĐ¡Đ¢Đ˜ ĐšĐĐ¢ĐĐ›Đ˜Đ¢Đ˜Đ§Đ•Đ¡ĐšĐ˜Đ¥ ĐŸĐĐ•Đ'ĐĐĐ©Đ•ĐĐ˜Đ™ Đ£Đ"Đ›Đ•Đ'ĐžĐ"ĐžĐĐžĐ"ĐžĐ' ĐĐ•Đ Đ•ĐžĐ›Đ		
6	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
7	Catalytic Conversions of Hydrocarbons over Zeolites at 170â€“260Â°C. Petroleum Chemistry, 2021, 61, 357-363.	1.4	1
8	Epoxy Nanocomposites with Carbon Nanotubes Produced by Floating Catalyst CVD. Nanomaterials, 2021, 11, 1213.	4.1	0
9	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
10	Electrodynamic properties of CNTs based metasurface created using 3D nano-manipulation. , 2021, , .		0
11	FEATURES OF ONION-LIKE CARBON OBTAINED IN THE PROCESS OF PARTIAL OXIDATION OF NATURAL GAS. ChemChemTech, 2021, 64, 41-47.	0.3	0
12	PREPARATION OF COMPOSITE THREADS AND HOLLOW CERAMIC FIBERS BASED ON CARBON FIBRE AND ALUMINUM OXIDE. ChemChemTech, 2021, 64, 55-59.	0.3	0
13	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
14	Fischerâ€“Tropsch Synthesis over a Cobalt Catalyst Supported on Titania-Doped Silicon Carbide. Catalysis in Industry, 2020, 12, 235-243.	0.7	2
15	Synthesis, Structure and Electrical Resistivity of Carbon Nanotubes Synthesized over Group VIII Metallocenes. Nanomaterials, 2020, 10, 2279.	4.1	14
16	A Superhydrophobic Coating Based on Onion-Like Carbon Nanoparticles. Technical Physics Letters, 2020, 46, 1120-1123.	0.7	4
17	Synergistic effect in Coâ€“zeolite catalyzed transformations of hydrocarbons under Fischerâ€“Tropsch conditions. Mendeleev Communications, 2020, 30, 198-201.	1.6	7
18	Irreversible high pressure phase transformation of onion-like carbon due to shell confinement. Diamond and Related Materials, 2020, 107, 107908.	3.9	8

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19	Water-Zeolite Interfaces for Controlling Reaction Routes in Fischer- Tropsch Synthesis of Alternative Fuels. Current Catalysis, 2020, 9, 3-22.	0.5	1
20	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
21	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
22	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
23	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
24	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
25	Experimental Study of the Fischerâ€"Tropsch Synthesis Using Nitrogen-Containing Syngas and Variable Pressure. Kataliz V Promyshlennosti, 2020, 20, 381-390.	0.3	0
26	Investigation of Structural and Physical Properties of Composite Catalyst Support with Exfoliated Graphite Additive. Advanced Materials & Technologies, 2020, , 019-024.	0.2	0
27	The Fischer â€" Tropsch synthesis with a cobalt catalyst on titania-doped silicon carbide. Kataliz V Promyshlennosti, 2020, 20, 100-109.	0.3	0
28	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
29	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
30	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
31	Longer carbon nanotubes with low impurity level. Materials Today: Proceedings, 2018, 5, 25948-25950.	1.8	4
32	Nanostructured aluminum-matrix composite materials with controlled reactivity, modified by carbon and transition metals. Materials Today: Proceedings, 2018, 5, 26133-26139.	1.8	0
33	Carbon nanotubes by continuous growth, pulling and harvesting into big spools. Materials Today: Proceedings, 2018, 5, 25951-25955.	1.8	2
34	Formation of concentric shell carbon by homogeneous partial oxidation of methane. Chemical Physics Letters, 2018, 713, 242-246.	2.6	10
35	Carbon nanotube cloth for electrochemical charge storage in aqueous media. Journal of Electroanalytical Chemistry, 2018, 827, 58-63.	3.8	7
36	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

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37	Catalytic 3D polymerization of C₆₀. Fullerenes Nanotubes and Carbon Nanostructures, 2018, 26, 465-470.	2.1	8
38	CHANGES IN PHYSICAL PROPERTIES OF SUPER LONG CARBON NANOTUBES AFTER DIFFERENT METHODS OF PURIFICATION. ChemChemTech, 2018, 59, 74.	0.3	2
39	MODIFICATION OF SURFACE OF DOUBLE WALL CARBON NANO TUBES BY FULLERENE C60. ChemChemTech, 2018, 59, 12.	0.3	2
40	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
41	Effect of rhenium on Fischerâ€“Tropsch synthesis in the presence of cobaltâ€“zeolite catalysts. Petroleum Chemistry, 2017, 57, 251-256.	1.4	8
42	Structural features of iron-containing particles inside carbon nanotubes. Materials Research Express, 2017, 4, 075053.	1.6	0
43	Fullerene-Clad Ultra-Long Carbon Nanotubes. Materials Today: Proceedings, 2017, 4, 11534-11537.	1.8	0
44	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
45	XPS characterization of MWCNT and C₆₀-based composites. Fullerenes Nanotubes and Carbon Nanostructures, 2016, 24, 535-540.	2.1	8
46	The unexpected stability of multiwall nanotubes under high pressure and shear deformation. Applied Physics Letters, 2016, 109, .	3.3	19
47	Novel Flexible Composites Reinforced with CNT-Grafted Carbon Fibers. MRS Advances, 2016, 1, 1453-1458.	0.9	1
48	C60 fullerene decoration of carbon nanotubes. Journal of Experimental and Theoretical Physics, 2016, 123, 985-990.	0.9	2
49	Fischerâ€“Tropsch synthesis with cobalt catalyst and zeolite multibed arrangement. Petroleum Chemistry, 2016, 56, 275-280.	1.4	1
50	Modification of carbon fiberâ€“polyurethane interface with carbon nanotubes. Materials Research Innovations, 2016, 20, 14-17.	2.3	4
51	Phase composition, physicochemical and catalytic properties of cobaltâ€“aluminumâ€“zeolite systems. Russian Chemical Bulletin, 2015, 64, 2371-2376.	1.5	3
52	The role of zeolite in the Fischerâ€“Tropsch synthesis over cobaltâ€“zeolite catalysts. Russian Chemical Reviews, 2015, 84, 1176-1189.	6.5	49
53	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
54	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

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55	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
56	Fischerâ€“Tropsch synthesis on cobalt-based catalysts with different thermally conductive additives. Applied Catalysis A: General, 2015, 505, 260-266.	4.3	19
57	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
58	Formation of surface cobalt structures in SiC-supported Fischerâ€“Tropsch catalysts. RSC Advances, 2015, 5, 78586-78597.	3.6	14
59	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
60	Efficiency of Gas-to-Liquids Technology with Different Synthesis Gas Production Methods. Industrial & Engineering Chemistry Research, 2014, 53, 2758-2763.	3.7	14
61	Synthesis of ultrahard fullerite with a catalytic 3D polymerization reaction of C60. Carbon, 2014, 76, 250-256.	10.3	50
62	Effect of introduced zeolite on the Fischerâ€“Tropsch synthesis over a cobalt catalyst. Mendeleev Communications, 2014, 24, 316-318.	1.6	13
63	Thermodynamics of wax formation in the fischer-tropsch synthesis products. Theoretical Foundations of Chemical Engineering, 2013, 47, 191-200.	0.7	6
64	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
65	Fischerâ€“Tropsch Synthesis in the Presence of Composite Catalysts with Different Types of Active Cobalt. Mendeleev Communications, 2013, 23, 44-45.	1.6	14
66	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
67	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
68	Modeling of hydrodynamics in microchannel reactor for Fischerâ€“Tropsch synthesis. International Journal of Heat and Mass Transfer, 2012, 55, 1695-1708.	4.8	11
69	Simulation of fluid dynamics in a microchannel Fischer-Tropsch reactor. Theoretical Foundations of Chemical Engineering, 2012, 46, 8-19.	0.7	10
70	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
71	Unstable Thermal Modes in Fischer-Tropsch Reactors With Fixed Pelletized Catalytic Bed. , 2010, , .		2
72	Calculating the dynamic viscosity of paraffins using the Lee-Kesler equation. Theoretical Foundations of Chemical Engineering, 2010, 44, 448-453.	0.7	2

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73	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
74	Synthesis of completely deuterated hydrocarbons. Catalysis in Industry, 2010, 2, 246-254.	0.7	0
75	Prospective Ways for Production and Application of Longer Carbon Nanotubes. Fullerenes Nanotubes and Carbon Nanostructures, 2010, 18, 516-522.	2.1	5
76	Framework composition and activity of platinum-containing high-silica zeolites in n-hexane isomerization. Kinetics and Catalysis, 2009, 50, 247-254.	1.0	4
77	The structure and activity of Pt6 particles in ZSM-5 type zeolites. Catalysis Today, 2009, 144, 273-277.	4.4	10
78	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
79	Liquid-vapor thermodynamic equilibrium in Fischer-Tropsch synthesis products. Theoretical Foundations of Chemical Engineering, 2008, 42, 216-219.	0.7	16
80	Higher Yield of Short Multiwall Carbon Nanotubes by Catalytic Growth. , 2008, , .		0
81	Synthesis of carbon nanotubes by catalytic conversion of methane: Competition between active components of catalyst. Carbon, 2007, 45, 62-69.	10.3	37
82	Carbonization of heavy residues of different origin. Petroleum Chemistry, 2007, 47, 288-298.	1.4	2
83	Catalytic decomposition of methane on impregnated carbon fiber. Solid Fuel Chemistry, 2007, 41, 307-312.	0.7	0
84	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
85	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
86	Structure and electrical conductivity of (La0.9Sr0.1)[(Ga1 âˆ' x Crx)0.8Mg0.2]O3 âˆ' Î´ (x = 0â€"0.35) solid solutions. Inorganic Materials, 2006, 42, 689-695.	0.8	2
87	Ni-Fe Competition in the Catalytic Growth of Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
88	Niâ€"Fe Competition in the Catalysis of Carbon Nanotube Growth. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 201-206.	2.1	3
89	Formation of Various Carbon Nanoclusters from Laserâ€Produced Carbon Plasma. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 12, 11-16.	2.1	2
90	Polymer-based nanocomposites for bolometric applications. Technical Physics Letters, 2004, 30, 663-665.	0.7	2

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91	Carbon Nanofibers: A New Ultrahigh-Strength Material for Chemical Technology. Theoretical Foundations of Chemical Engineering, 2003, 37, 429-438.	0.7	92
92	Discovery and Optimization of New ZnO-Based Phosphors Using a Combinatorial Method. Advanced Functional Materials, 2003, 13, 519-524.	14.9	56
93	Formation of multishell fullerenes from vaporized carbons. Molecular Crystals and Liquid Crystals, 2002, 386, 103-107.	0.9	1
94	Fabrication and characterization of thin-film phosphor combinatorial libraries. Solid State Sciences, 2002, 4, 779-782.	3.2	8
95	Synthesis of multishell fullerenes by laser vaporization of composite carbon targets. Physics of the Solid State, 2002, 44, 603-606.	0.6	13
96	Multishell fullerenes by laser vaporization of composite carbonâ€"metal targets. Chemical Physics Letters, 2002, 355, 133-138.	2.6	16
97	Polythiophene/fullerene photovoltaic cells. Synthetic Metals, 2001, 121, 1581-1582.	3.9	6
98	Field-induced evaporation of carbon nanotubes. Applied Physics A: Materials Science and Processing, 2001, 73, 301-304.	2.3	18
99	A path to larger yields of multishell fullerenes. Carbon, 2001, 39, 1938-1941.	10.3	8
100	Photoâ€"and cathodoluminescence in yttriumâ€"aluminiumâ€"borateâ€"based phosphors. Journal of Materials Research, 2000, 15, 2662-2666.	2.6	3
101	Nanostructure of laser pyrolysis carbon blacks: observation of multiwall fullerenes. Solid State Sciences, 2000, 2, 347-353.	0.7	18
102	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
103	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
104	Strong Activator-Host Interaction in Rare Earth Borate Phosphors. Materials Research Society Symposia Proceedings, 1999, 560, 209.	0.1	1
105	The observation of multiwall fullerenes in thermally treated laser pyrolysis carbon blacks. Carbon, 1999, 37, 1855-1858.	10.3	32
106	Shubnikov-De Haas effect and angular dependent magnetoresistance oscillations in SbCl5-intercalated graphite. Solid State Communications, 1998, 107, 165-169.	1.9	8
107	Successful Intercalation into Multiwall Carbon Nanotubes without Breaking Tubular Structure. Molecular Crystals and Liquid Crystals, 1998, 310, 159-164.	0.3	6
108	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

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109	Metallic conductivity in bundles ofFeCl3-intercalated multiwall carbon nanotubes. Physical Review B, 1998, 57, 15629-15632.	3.2	10
110	Graphite Intercalation Compound with Cesium Superoxide: XPS, UPS and STM Study. Molecular Crystals and Liquid Crystals, 1998, 310, 237-242.	0.3	3
111	Hydrogen Cycling-induced Phase Segregation in AB 5-Type Intermietallics. Materials Research Society Symposia Proceedings, 1998, 513, 287.	0.1	0
112	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
113	Evidence for Quantum Transport in Carbon Nanotube Bundles. Springer Series in Materials Science, 1998, , 119-124.	0.6	0
114	Magnetotransport in bundles of intercalated carbon nanotubes. Physical Review B, 1997, 56, 2161-2165.	3.2	47
115	Surface properties of KOX and CsOX graphite intercalation compounds. Synthetic Metals, 1997, 85, 1667-1668.	3.9	3
116	Magneto-oscillatory behavior of carbon nanotube bundles. Synthetic Metals, 1997, 86, 2001-2002.	3.9	2
117	Intercalation into carbon nanotubes without breaking the tubular structure. Synthetic Metals, 1997, 86, 2049-2050.	3.9	26
118	Synthesis and XPS investigation of superdense lithium-graphite intercalation compound, LiC2. Synthetic Metals, 1996, 80, 243-247.	3.9	44
119	New graphite intercalation compounds with heavy alkali metal superoxides. Journal of Physics and Chemistry of Solids, 1996, 57, 821-825.	4.0	5
120	Intercalation into carbon nanotubes. Carbon, 1996, 34, 1301-1303.	10.3	59
121	Angular dependent magnetoresistance oscillations in SbCl5-intercalated graphite. Journal of Physics and Chemistry of Solids, 1996, 57, 761-763.	4.0	2
122	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
123	Synthesis of new cesiumî—¸oxygen graphite intercalation compounds. Journal of Alloys and Compounds, 1995, 226, L1-L2.	5.5	2
124	Equilibria in the hydrogen-intermetallics systems with high dissociation pressure. Journal of Alloys and Compounds, 1995, 231, 498-502.	5.5	6
125	New graphite intercalation compounds C4KO2 and C8KO2. Synthetic Metals, 1995, 71, 1767-1768.	3.9	1
126	Potassium-oxygen graphite intercalation compounds. Synthetic Metals, 1994, 68, 79-83.	3.9	29

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127	Model for constitution of graphite intercalation compounds. Synthetic Metals, 1994, 63, 1-6.	3.9	10
128	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
129	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
130	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
131	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
132	Equilibria in CexLa1â^'xNi5â^'yAly-H2 systems at subcritical and supercritical parameters. Journal of Alloys and Compounds, 1992, 187, 9-15.	5.5	2
133	Hydrogen sorption in LaNi4.98Al0.02-H2 at low temperatures. Thermochimica Acta, 1992, 194, 253-258.	2.7	0
134	Degradation of LaNi5 by thermobaric cycling in hydrogen and hydrogen-nitrogen mixture. International Journal of Hydrogen Energy, 1990, 15, 723-726.	7.1	20
135	Studies of sorption-desorption processes in the CexLa1â^'xNi5â^'H2 system by DSC. Thermochimica Acta, 1990, 160, 201-207.	2.7	5
136	DTA as a method of studying chemical reactions at high pressures. Thermochimica Acta, 1987, 113, 233-241.	2.7	2
137	Superconductivity of the potassium graphite intercalation compounds. Solid State Communications, 1986, 57, 421-423.	1.9	6