Igor Sedov

List of Publications by Year in Descending Order

62 papers	297 citations	10 h-index	14 g-index
64 ext. papers	403 ext. citations	2 avg, IF	3.94 L-index

#	Paper	IF	Citations
62	A Comprehensive Review on the Prospects of Using Hydrogen–Methane Blends: Challenges and Opportunities. *Energies*, **2022**, 15, 2265	3.1	4
61	Gas-Phase Oxidation of Natural and Associated Gases. *Catalysis in Industry*, **2022**, 14, 1-10	0.8	0
60	The Fuel of Our Future: Hydrogen or Methane? **2022**, 1, 96-106		1
59	Catalytic Reactors for Dehydrogenation of Liquid Organic Hydrogen Carriers. *Russian Journal of Applied Chemistry*, **2021**, 94, 1011-1021	0.8	2
58	Production of Hydrogen from Propane–Butane Mixture in a Combined Process of Matrix and Steam Conversion. *Russian Journal of Applied Chemistry*, **2021**, 94, 927-933	0.8	0
57	The State and Development Prospects of the Global Hydrogen Energy Sector. *Russian Journal of General Chemistry*, **2021**, 91, 1912-1928	0.7	2
56	State of the Global Market of Bimodal Polyethylenes and the Basic Technologies for Their Production. *Russian Journal of General Chemistry*, **2021**, 91, 571-581	0.7	2
55	Comparison of Various Options for Designing the Direct Oxidation of Methane to Methanol. *Russian Journal of Applied Chemistry*, **2021**, 94, 509-517	0.8	3
54	Physical Methods for Studying Chemical Reactions: New Non-Catalytic Methods for Processing Hydrocarbon Gases. *Russian Journal of Physical Chemistry B*, **2021**, 15, 498-505	1.2	1
53	Activity of a New Chromium(III) Complex with a Pentadentate (N_3O_2) Schiff-Base Ligand in the Reaction of Carbon Dioxide with Propylene Oxide. *Kinetics and Catalysis*, **2021**, 62, 428-435	1.5	0
52	Market Potential of Industrial Technologies for Production of Synthetic Bases of Motor Oils. *Russian Journal of General Chemistry*, **2021**, 91, 1243-1259	0.7	1
51	Oxidative Cracking of Propane in the Presence of Hydrogen. *Russian Journal of Applied Chemistry*, **2021**, 94, 787-792	0.8	
50	Non-Catalytic Steam Reforming of C_1–C_4 Hydrocarbons. *Petroleum Chemistry*, **2021**, 61, 762-772	1.1	3
49	Utilization of renewable sources of biogas for small-scale production of liquid fuels. *Catalysis Today* , **2021**, 379, 23-27	5.3	8
48	Processing of natural and casing-head gases by the gas-phase oxidation. *Kataliz V Promyshlennosti*, **2021**, 21, 227-237	0.3	1
47	Hydrogenation/Dehydrogenation Catalysts for Hydrogen Storage Systems Based on Liquid Organic Carriers (A Review). *Petroleum Chemistry*, **2021**, 61, 977-988	1.1	4
46	Thermodynamic Evaluation of Noncatalytic Conversion of Natural Gas with the Production of Synthesis Gas. *Russian Journal of Physical Chemistry B*, **2021**, 15, 969-976	1.2	1

45	Cost-Effectiveness Assessment of the Scale of Hydrogen Production by Various Methods. *Russian Journal of General Chemistry*, **2021**, 91, 2743-2757	0.7	2
44	Application of Supercritical Fluid Technologies in Chemical and Petrochemical Industries (Review). *Petroleum Chemistry*, **2020**, 60, 244-254	1.1	6
43	Hydrogen Storage Using Liquid Organic Carriers. *Russian Journal of Applied Chemistry*, **2020**, 93, 1815-1830	0.8	9
42	Analysis of the State and Development Prospects of the Industrial Catalysts Market for Polyolefins Production. *Russian Journal of General Chemistry*, **2020**, 90, 1141-1162	0.7	3
41	Kinetics of Carbon Dioxide Terpolymerization with Propylene Oxide and Hexene Oxide. *Kinetics and Catalysis*, **2020**, 61, 569-574	1.5	
40	Effect of Hydrogen, Carbon Monoxide, Synthesis Gas, and Steam Additives on the Characteristics of Matrix Conversion of Rich Methane–Oxygen Mixtures. *Petroleum Chemistry*, **2020**, 60, 818-826	1.1	4
39	Kinetics of Ternary Copolymerization of Carbon Dioxide with Propylene Oxide, Butene Oxide, and Cyclohexene Oxide. *Polymer Science - Series B*, **2019**, 61, 395-403	0.8	1
38	The role of homogeneous steam reforming of acetylene in the partial oxidation of methane to syngas in matrix type converters. *Chemical Engineering Science*, **2019**, 207, 744-751	4.4	10
37	Prospects of Conversion of Hydrocarbon Gases to Liquid Products Based on Nitrogen-Rich Synthesis Gas (Review). *Petroleum Chemistry*, **2019**, 59, 370-379	1.1	12
36	Matrix conversion of natural gas to syngas: The main parameters of the process and possible applications. *Chemical Engineering Journal*, **2019**, 377, 120883	14.7	16
35	Effect of Hydrogen and Carbon Monoxide Additions on Partial Oxidation of Methane at Elevated Pressures. *Russian Journal of Applied Chemistry*, **2019**, 92, 1726-1733	0.8	
34	Oxidative Cracking of Oil Refinery Gases. *Russian Journal of Applied Chemistry*, **2019**, 92, 1745-1750	0.8	2
33	Membrane Absorption of Ethylene from a Mixture with Ethane Using MDK-3 Composite Membranes. *Russian Journal of Applied Chemistry*, **2019**, 92, 1826-1834	0.8	1
32	Structurally uniform 1-hexene, 1-octene, and 1-decene oligomers: Zirconocene/MAO-catalyzed preparation, characterization, and prospects of their use as low-viscosity low-temperature oil base stocks. *Applied Catalysis A: General*, **2018**, 549, 40-50	5.1	32
31	5,6-Dihydrodibenzo[c,e][1,2]azaphosphinine-Based PNP Ligands, Cr(0) Coordination, and Cr(III) Precatalysts for Ethylene Oligomerization. *Organometallics*, **2018**, 37, 2660-2664	3.8	10
30	EFFECT OF STEAM ADDITION ON THE PROCESS OF MATRIX CONVERSION OF METHANE TO SYNGAS. *Gorenie I Vzryv (Moskva) Combustion and Explosion*, **2018**, 11, 18-23	0.5	2
29	Development of Functional Polymer Coatings Using Supercritical Fluids: Technologies, Markets, and Prospects. *Russian Journal of Physical Chemistry B*, **2018**, 12, 1132-1143	1.2	1
28	Effect of Hydrogen Addition on Oxidative Cracking of Ethane. *Russian Journal of Applied Chemistry*, **2018**, 91, 1767-1772	0.8	1

27	Analysis of the Fundamental Aspects of Oxidation of Rich Methane Mixtures in Matrix-Type Converters. *Russian Journal of Applied Chemistry*, **2018**, 91, 1500-1512	0.8	2
26	Development of Technologies for More Efficient Deep Processing of Natural Gas. *Russian Journal of Applied Chemistry*, **2018**, 91, 1922-1936	0.8	3
25	Production of Ethylene, CO, and Hydrogen by Oxidative Cracking of Oil Refinery Gas Components. *Russian Journal of Applied Chemistry*, **2018**, 91, 2065-2075	0.8	2
24	Catalytic Reactions of Homo- and Cross-Condensation of Ethanal and Propanal. *Petroleum Chemistry*, **2018**, 58, 1032-1035	1.1	1
23	Kinetic features and industrial prospects of the selective oxidative cracking of light alkanes. *Russian Chemical Reviews*, **2017**, 86, 47-74	6.8	12
22	Perspective tendencies in development of small scale processing of gas resources. *Pure and Applied Chemistry*, **2017**, 89, 1033-1047	2.1	2
21	Experimental approvement of the filterless hydroprocess technology using slurry reactor system with inertial separation. *Separation and Purification Technology*, **2017**, 186, 342-351	8.3	3
20	Adjustment of the fuel characteristics of wet and associated petroleum gases by partial oxidation of C2+ hydrocarbons. *Petroleum Chemistry*, **2017**, 57, 236-243	1.1	9
19	New Potentialities for Utilization of Associated Petroleum Gases in Power Generation and Chemicals Production. *Eurasian Chemico-Technological Journal*, **2017**, 19, 265	0.8	6
18	Synthesis of tris(cyclopentadienyl)zirconium tetrakis(pentafluorophenyl)borate. *Russian Chemical Bulletin*, **2016**, 65, 2708-2711	1.7	
17	Slurry reactor system with inertial separation for Fischer-Tropsch synthesis and other three-phase hydrogenation processes. *Canadian Journal of Chemical Engineering*, **2016**, 94, 518-523	2.3	12
16	Mechanism of the interaction of components in the metallocene catalytic systems containing titanium and zirconium tetracyclopentadienyls and methylaluminoxane. *Reaction Kinetics, Mechanisms and Catalysis*, **2016**, 119, 59-73	1.6	
15	Oxidative conversion of wet and associated gases to fuels for power plants. *Journal of Natural Gas Science and Engineering*, **2016**, 31, 9-14	4.6	4
14	Current state and prospects of development of technologies for the production of superhydrophobic materials and coatings. *Nanotechnologies in Russia*, **2016**, 11, 679-695	0.6	6
13	New horizons of small-tonnage gas chemistry. *Herald of the Russian Academy of Sciences*, **2016**, 86, 329-336	0.7	5
12	Experimental studies of natural gas to synthesis gas converters based on permeable cavity matrices. *Russian Journal of Applied Chemistry*, **2016**, 89, 1816-1824	0.8	12
11	New concept for small-scale GTL. *Chemical Engineering Journal*, **2015**, 282, 206-212	14.7	33
10	Platinum Group Metal-Catalysed Carbonylation as the Basis of Alternative Gas-To-Liquids Processes. *Johnson Matthey Technology Review*, **2015**, 59, 14-25	2.5	9

9	Dual-site hybrid catalysts for production of linear low-density polyethylene. *Journal of Polymer Research*, **2014**, 21, 1	2.7	2
8	Single-site catalysts in the industrial production of polyethylene. *Catalysis in Industry*, **2012**, 4, 129-140	0.8	10
7	Mixed and hybrid multisite catalysts for ethylene polymerization. *Russian Chemical Reviews*, **2012**, 81, 239-257	6.8	8
6	Reactions of methylaluminoxane and trimethylaluminum with zirconium and titanium tetracyclopentadienyl derivatives. *Russian Chemical Bulletin*, **2011**, 60, 1880-1884	1.7	1
5	Technologies for producing liquid motor fuels from wastes of renewable vegetable resources. *Polymer Science - Series D*, **2011**, 4, 252-258	0.4	
4	Photophysical, electronic, and catalytic properties of tetracyclopentadienylzirconium. *Doklady Physical Chemistry*, **2010**, 434, 177-179	0.8	1
3	Ethylene polymerization initiated by metallocene catalysts (C5H5)4Mt-MAO (Mt = Ti, Zr) in the presence of organometallic modifiers. *Polymer Science - Series B*, **2010**, 52, 63-66	0.8	3
2	Ethylene polymerization and copolymerization with hexene-1 on supported metallocene catalysts based on (C5H5)4Zr and methylaluminoxane. *Polymer Science - Series A*, **2007**, 49, 496-502	1.2	1
1	Polymerization of ethylene with the (C5H5)4Zr-methylaluminoxane soluble catalytic system. *Polymer Science - Series B*, **2007**, 49, 85-90	0.8	4