

# Sergei Lomakin

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

104 papers	2,131 citations	16 h-index	45 g-index
111 ext. papers	2,282 ext. citations	2 avg, IF	4.57 L-index

#	Paper	IF	Citations
104	Interaction of Nitrogen Dioxide with Poly-p-Phenylene Terephthalamide (Terlon). <i>Russian Journal of Physical Chemistry B</i> , <b>2022</b> , 16, 155-161	1.2	0
103	Correction of the Mechanism of Photolysis of Aminoazobenzole According to Kinetic Picosecond Spectroscopy. <i>Russian Journal of Physical Chemistry B</i> , <b>2022</b> , 16, 24-30	1.2	
102	The Study of Properties and Structure of Polylactide/Graphite Nanoplates Compositions. <i>Polymer Crystallization</i> , <b>2022</b> , 2022, 1-9	0.9	0
101	Comparative Analysis of Thermal and Physico-Mechanical Properties of Polyethylene Compositions Containing Microcrystalline and Nanofibrillary Cellulose. <i>Russian Journal of Physical Chemistry B</i> , <b>2021</b> , 15, 716-723	1.2	1
100	Study of the Mechanism of Fire-Retardant Action of Bio Flame Retardant Based on Oxidized Compounds of Cellulose-Containing Biomass. <i>Russian Journal of Physical Chemistry B</i> , <b>2020</b> , 14, 1028-1035	1.2	3
99	Study of products influence of rice waste liquid-phase catalytic oxidation on growth and plant development. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2020</b> , 848, 012108	0.4	
98	Synergetic flame retardant effect of bio-flame retardant based on oxidized wood in polyester/ compositions. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2020</b> , 848, 012109	0.4	
97	Thermal and Physical and Mechanical Properties of Polysulfone Composites with Carbon Nanotubes. <i>Russian Journal of Physical Chemistry B</i> , <b>2019</b> , 13, 519-524	1.2	9
96	Study of antiseptic properties of the flame retardant solution provided by oxidized plant waste with regard to wood staining and mold micromycetes. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 525, 012103	0.4	2
95	Effective Chemical Methods of Combustion Control: New Threats and New Solutions. <i>Herald of the Russian Academy of Sciences</i> , <b>2019</b> , 89, 151-156	0.7	2
94	Kinetics of Polyvinyl Alcohol Thermal Degradation in the Compositions with Boron Polyoxide: Part 1. Kinetics of Thermal Degradation. <i>Russian Journal of Physical Chemistry B</i> , <b>2019</b> , 13, 374-382	1.2	3
93	Kinetics of the Thermal Destruction of Polyvinyl Alcohol in Composites with Boron Polyoxide. Part 2. Analysis of the Products of Thermal Destruction. <i>Russian Journal of Physical Chemistry B</i> , <b>2019</b> , 13, 514-518	1.2	1
92	Influence of the Chemical Nature and Structural Characteristics of Nanofillers on the Mechanism of Polyethylene Pyrolysis. <i>Russian Journal of Physical Chemistry B</i> , <b>2019</b> , 13, 825-830	1.2	3
91	Photoinduced Reactions of Benzophenone in Biaxially Oriented Polypropylene. <i>Journal of Physical Chemistry A</i> , <b>2018</b> , 122, 4298-4305	2.8	4
90	Role of Structural Stresses in the Thermodestruction of Supercoiled Cellulose Macromolecules after Nitration. <i>Russian Journal of Physical Chemistry B</i> , <b>2018</b> , 12, 36-45	1.2	4
89	Overall Kinetics of Heat Treatment of Municipal Solid Waste. <i>Doklady Chemistry</i> , <b>2018</b> , 479, 68-70	0.8	
88	Modeling of carbonaceous feedstock pyrolysis in a countercurrent tubular reactor. <i>Doklady Chemistry</i> , <b>2017</b> , 475, 192-195	0.8	0

87	The effect of graphite nanoplates on the thermal degradation and combustion of polyethylene. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 128, 275-280	6	14
86	Oxygen-induced free-radical reactions in phenylone nitrated by nitroxide dioxide. <i>Russian Journal of Physical Chemistry B</i> , <b>2017</b> , 11, 777-785	1.2	1
85	The effect of graphite nanoslabs on thermal oxidative destruction of polyethylene. <i>Polymer Science - Series D</i> , <b>2017</b> , 10, 330-333	0.4	1
84	Macrokinetics of carbonaceous feedstock pyrolysis in a tubular reactor of variable cross section. <i>Doklady Chemistry</i> , <b>2017</b> , 477, 254-256	0.8	
83	Structural dynamic properties of nonwoven composite mixtures based on ultrafine tissues of poly(3-hydroxybutyrate) with chitosan. <i>Russian Journal of Physical Chemistry B</i> , <b>2016</b> , 10, 687-698	1.2	14
82	Macrokinetic model of pyrolysis of carbonaceous feedstock in a tubular reactor. <i>Doklady Chemistry</i> , <b>2016</b> , 467, 76-78	0.8	4
81	Optimal temperature conditions of carbonaceous feedstock pyrolysis. <i>Doklady Chemistry</i> , <b>2016</b> , 470, 302-306	0.8	
80	Modeling of carbonaceous feedstock pyrolysis in a multichannel reactor. <i>Doklady Chemistry</i> , <b>2016</b> , 470, 293-296	0.8	2
79	On the role of branched-chain (autocatalytic) reactions in the carbonaceous feedstock pyrolysis kinetics at oscillating temperature. <i>Doklady Chemistry</i> , <b>2016</b> , 471, 362-364	0.8	
78	Nonwoven blend composites based on poly(3-hydroxybutyrate)/chitosan ultrathin fibers prepared via electrospinning. <i>Polymer Science - Series A</i> , <b>2016</b> , 58, 76-86	1.2	17
77	Kinetics of pulse pyrolysis of carbonaceous feedstock under oscillating temperature conditions. <i>Doklady Chemistry</i> , <b>2015</b> , 462, 112-114	0.8	7
76	Structural-dynamic characteristics of matrices based on ultrathin poly(3-hydroxybutyrate) fibers prepared via electrospinning. <i>Polymer Science - Series A</i> , <b>2015</b> , 57, 131-138	1.2	15
75	Novel Class of Eco-Flame Retardants Based on the Renewable Raw Materials <b>2014</b> , 255-266		4
74	Trends on New Biodegradable Blends on the Basis of Copolymers 3-Hydroxybutyrate with Hydroxyvalerate and Segmented Polyetherurethane <b>2014</b> , 151-158		
73	Structure and biological properties of sodium and potassium 1-(carboxy)-1-(N-methylamide)-2-(3,5-di-tert-butyl)-4-hydroxyphenyl-propionates. <i>Russian Journal of Physical Chemistry B</i> , <b>2013</b> , 7, 44-49	1.2	4
72	Changes in the structural parameters and molecular dynamics of polyhydroxybutyrate-chitosan mixed compositions under external influences. <i>Russian Journal of Physical Chemistry B</i> , <b>2013</b> , 7, 225-231	1.2	10
71	Analysis of thermal stability of polymer nanocomposites based on polypropylene. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe i Neftyanoe Mashinostroenie)</i> , <b>2013</b> , 49, 333-337	0.6	
70	Free-radical cross-linking of serum albumin molecules on the surface of magnetite nanoparticles in aqueous dispersion. <i>Colloid Journal</i> , <b>2013</b> , 75, 7-13	1.1	10

- 69 Formation of 3,3',5,5'-tetra(tert-butyl)diphenylquinone and 3,3',5,5'-tetra(tert-butyl)-4,4'-dihydroxybiphenyl in the reaction of 2-(acetylamino)-3-[3',5'-di(tert-butyl)-4'-hydroxyphenyl]propanoic acid with thionyl chloride. *Russian Chemical Bulletin*, **2013**, 62, 2265-2265 1.7 1
- 68 Effect of external influences on the structural and dynamic parameters of polyhydroxybutyrate-hydroxyvalerate-based biocomposites. *Russian Journal of Physical Chemistry B*, **2012**, 6, 72-80 1.2 13
- 67 The structure, properties, and thermal destruction of biodegradable blends of cellulose and ethylcellulose with synthetic polymers. *Russian Journal of Physical Chemistry B*, **2012**, 6, 416-424 1.2 8
- 66 Probe mobility dynamics, crystal structure, and isotope exchange in PHBV and SPEU blend compositions. *Doklady Physical Chemistry*, **2012**, 446, 176-179 0.8 10
- 65 Effect of the graphite nanoplatelet size on the mechanical, thermal, and electrical properties of polypropylene/exfoliated graphite nanocomposites. *Journal of Applied Polymer Science*, **2012**, 128, n/a-n/a 3.9 12
- 64 Polypropylene composite with carbon nanotubes. *Chemical and Petroleum Engineering (English Translation of Khimicheskoe i Neftyanoe Mashinostroenie)*, **2012**, 47, 741-750 0.6 3
- 63 The youngest natural oil on earth. *Doklady Chemistry*, **2011**, 438, 144-147 0.8 13
- 62 Thermal degradation of biodegradable blends of polyethylene with cellulose and ethylcellulose. *Thermochimica Acta*, **2011**, 521, 66-73 2.9 46
- 61 Thermal Degradation and Combustion Behavior of Polypropylene/MWCNT Composites. *Molecular Crystals and Liquid Crystals*, **2010**, 523, 106/[678]-119/[691] 0.5 4
- 60 The effect of multi-walled carbon nanotubes addition on the thermo-oxidative decomposition and flammability of PP/MWCNT nanocomposites. *Journal of Materials Science*, **2010**, 45, 633-640 4.3 18
- 59 Solid-phase polycondensation of aspartic acid 1. Kinetics of the process as evidenced by TGA and DSC data. *Russian Chemical Bulletin*, **2010**, 59, 806-811 1.7 2
- 58 The effect of multiwalled carbon nanotube dimensions on the morphology, mechanical, and electrical properties of melt mixed polypropylene-based composites. *Journal of Applied Polymer Science*, **2010**, 117, NA-NA 2.9 9
- 57 Features of stable radical generation in lignin on exposure to nitrogen dioxide. *Polymer Degradation and Stability*, **2010**, 95, 1177-1182 4.7
- 56 Alkaline hydrolysis of diethyl N-acetylamino(3,5-di-tert-butyl-4-hydroxybenzyl)malonate. *Russian Chemical Bulletin*, **2009**, 58, 920-925 1.7 1
- 55 Regulation of solid-phase polycondensation of L-aspartic acid. *Doklady Physical Chemistry*, **2009**, 429, 252-254 0.8
- 54 Kinetic analysis of solid-phase polycondensation of aspartic acid. *Doklady Physical Chemistry*, **2008**, 423, 327-329 0.8 2
- 53 Photo- and thermal-oxidative stability of novel material for photovoltaics: MEH-PPV/TNF blends. *Renewable Energy*, **2008**, 33, 259-261 8.1 4
- 52 Thermal degradation and combustion behavior of the polyethylene/clay nanocomposite prepared by melt intercalation. *Journal of Thermal Analysis and Calorimetry*, **2008**, 94, 719-726 4.1 29

51	Thermal properties of polyethylene/montmorillonite nanocomposites prepared by intercalative polymerization. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 1340-1353	4.3	35
50	Polyethylene-layered silicate nanocomposites: Synthesis, structure, and properties. <i>Nanotechnologies in Russia</i> , <b>2008</b> , 3, 330-343	0.6	11
49	Preparation and characteristics of composites based on polypropylene and ultradispersed calcium carbonate. <i>Polymer Science - Series A</i> , <b>2008</b> , 50, 1214-1225	1.2	6
48	Morphology, deformation behavior and thermomechanical properties of polypropylene/maleic anhydride grafted polypropylene/layered silicate nanocomposites. <i>Journal of Applied Polymer Science</i> , <b>2007</b> , 105, 3836-3850	2.9	27
47	Enhanced photo and thermal oxidative stability of the charge-transfer complexes of a conjugated polymer. <i>Mendeleev Communications</i> , <b>2007</b> , 17, 32-33	1.9	2
46	Thermal degradation and combustion of a polypropylene nanocomposite based on organically modified layered aluminosilicate. <i>Polymer Science - Series A</i> , <b>2006</b> , 48, 72-84	1.2	9
45	Synthesis of an inorganic-organic polymer blend from orthoboric acid and caprolactam. <i>Polymer Science - Series A</i> , <b>2006</b> , 48, 228-233	1.2	5
44	Carbonization of Poly(vinyl Alcohol) in Blends with Boron Polyoxide. <i>Doklady Physical Chemistry</i> , <b>2005</b> , 403, 154-158	0.8	19
43	Kinetic study of polypropylene nanocomposite thermo-oxidative degradation. <i>Polymer International</i> , <b>2005</b> , 54, 999-1006	3.3	26
42	Polymeric flame retardants <b>2005</b> , 243-259		1
41	High-Temperature Thermal Degradation of Polyethylene in an Inorganic Polyoxide Matrix. <i>Doklady Physical Chemistry</i> , <b>2004</b> , 398, 231-235	0.8	6
40	Specific Features of Thermal Degradation of Polypropylene in the Presence of Magnesium Hydroxide. <i>Russian Journal of Applied Chemistry</i> , <b>2004</b> , 77, 445-448	0.8	9
39	Thermal stability of native polybutylene terephthalate. <i>Journal of Applied Polymer Science</i> , <b>2004</b> , 92, 2351-2356	2.9	2
38	Thermal Degradation of Polystyrene-Polydimethylsiloxane Blends. <i>Russian Journal of Applied Chemistry</i> , <b>2003</b> , 76, 472-482	0.8	5
37	Ecological issue of polymer flame retardancy. <i>Journal of Applied Polymer Science</i> , <b>2002</b> , 86, 2449-2462	2.9	83
36	Thermal degradation and combustion of polymeric blends. <i>Journal of Applied Polymer Science</i> , <b>2002</b> , 86, 3300-3311	2.9	5
35	Thermal polydimethylsiloxane degradation. Part 2. The degradation mechanisms. <i>Polymer</i> , <b>2002</b> , 43, 2011-2015	3.9	375
34	Polydimethylsiloxane thermal degradation Part 1. Kinetic aspects. <i>Polymer</i> , <b>2001</b> , 42, 2395-2402	3.9	525

33	Polymer layered silicate nanocomposites. <i>Macromolecular Materials and Engineering</i> , <b>2000</b> , 279, 1-9	3.9	423
32	The influence of shear forces on clay modification with oppositely charged polyelectrolytes. <i>Macromolecular Materials and Engineering</i> , <b>2000</b> , 279, 10-18	3.9	5
31	Ecological Aspects of Polymer Flame Retardation. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>2000</b> , 47, 61-78	3	2
30	Ecological aspects of polymer flame retardation. <i>Journal of Vinyl and Additive Technology</i> , <b>1999</b> , 5, 12-202		9
29	Characterization of flame-retarded polymer combustion chars by solid-state <sup>13</sup> C and <sup>29</sup> Si NMR and EPR. <i>Fire and Materials</i> , <b>1998</b> , 22, 61-67	1.8	24
28	Polymer flame retardancy: A new approach. <i>Journal of Applied Polymer Science</i> , <b>1998</b> , 68, 715-725	2.9	47
27	Ecological Aspects of Polymer Flame Retardation. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1998</b> , 41, 153-169	3	
26	Novel Low Flammable Coating Based on Polyvinyl Alcohol. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1997</b> , 38, 321-328	3	6
25	New Aspects of Ecologically Friendly Polymer Flame Retardant Systems. <i>Polymer-Plastics Technology and Engineering</i> , <b>1997</b> , 36, 647-668		2
24	Innovative type of low flammability varnish based on poly(vinyl alcohol). <i>Polymer Degradation and Stability</i> , <b>1997</b> , 57, 279-282	4.7	7
23	New type of ecologically safe flame retardant based on polymer char former. <i>Polymer Degradation and Stability</i> , <b>1996</b> , 51, 343-350	4.7	7
22	New aspects of ecologically friendly polymer flame retardant systems. <i>Polymer Degradation and Stability</i> , <b>1996</b> , 54, 223-233	4.7	31
21	Polymethacrylate Networks: Thermodynamics and Kinetics of Thermal Degradation. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 31, 153-170	3	2
20	Pyrolysis and Carbonization of Cross-Linked Poly(methyl methacrylate). <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 33, 133-140	3	2
19	New Types of Ecologically Safe Flame Retardant Polymer Systems. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 31, 119-129	3	
18	Advances in Nylon 6,6 Flame Retardancy. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 32, 173-202	3	9
17	Polypropylene Flame Retardant System Based on Si-SnCl <sub>2</sub> . <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 32, 203-211	3	4
16	New Types of Ecologically Safe Flame Retardant Systems for Polymethylmethacrylate. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1996</b> , 32, 213-220	3	6

15	Pyrolysis and Carbonization of Cross-Linked Poly(methyl methacrylate). <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1995</b> , 27, 223-230	3	2
14	New Types of Ecologically Safe Flame-Retardant Polymer Systems. <i>ACS Symposium Series</i> , <b>1995</b> , 186-198	0.4	4
13	Flammability Properties of Honeycomb Composites and Phenol-Formaldehyde Resins. <i>ACS Symposium Series</i> , <b>1995</b> , 245-255	0.4	7
12	Thermal and Oxydative Stability of PVA and Nylon 6,6. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , <b>1994</b> , 26, 187-194	3	8
11	An investigation of the thermal stability and char-forming tendency of cross-linked poly(methyl methacrylate). <i>Polymer Degradation and Stability</i> , <b>1993</b> , 41, 229-243	4.7	40
10	Molecular Dynamics Modeling of Polymer Flammability. <i>Materials Research Society Symposia Proceedings</i> , <b>1992</b> , 278, 47		5
9	The thermal degradation of net polymethacrylates. <i>Polymer Degradation and Stability</i> , <b>1992</b> , 36, 187-198	4.7	5
8	Thermal degradation of net polymethacrylates based on oligomers with conjugated acetylene groups. <i>Polymer Degradation and Stability</i> , <b>1992</b> , 37, 217-221	4.7	
7	Effect of a carbon black-graphite filler on the thermal degradation of a methylphenylsiloxane polymer. <i>Polymer Science USSR</i> , <b>1988</b> , 30, 1952-1959		1
6	Thermal degradation of cellulose diacetate. <i>Polymer Science USSR</i> , <b>1985</b> , 27, 1917-1926		2
5	Study of the kinetics and thermodynamics of thermal breakdown of reticular polymers of dimethacrylic esters of n-Alkalene glycols. <i>Polymer Science USSR</i> , <b>1982</b> , 24, 2378-2384		
4	Calculation of the thermodynamic properties of the dimethacrylate esters of aliphatic glycols. <i>Bulletin of the Academy of Sciences of the USSR Division of Chemical Science</i> , <b>1980</b> , 29, 1438-1442		
3	Applied Nanotechnology		6
2	Key Engineering Materials, Volume 1		2
1	Study of liquid-phase catalytic oxidation of natural renewable raw materials in alkaline media. <i>IOP Conference Series: Materials Science and Engineering</i> , 525, 012096	0.4	