Sergey N Semenov

List of Publications by Year
in descending order

36	1,662	361413 20	361022 35
papers	citations	h-index	g-index

41	41	41	2304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spatiotemporal Regulation of Hydrogel Actuators by Autocatalytic Reaction Networks. Advanced Materials, 2022, 34, e2106816.	21.0	22
2	Unconventional approaches for organic electrosynthesis: Recent progress. Current Opinion in Electrochemistry, 2022, 35, 101050.	4.8	10
3	Coupling of Alternating Current to Transition-Metal Catalysis: Examples of Nickel-Catalyzed Cross-Coupling. Journal of Organic Chemistry, 2021, 86, 782-793.	3.2	49
4	Autocatalysis: Kinetics, Mechanisms and Design. ChemSystemsChem, 2021, 3, e2000026.	2.6	51
5	Autocatalytic and oscillatory reaction networks that form guanidines and products of their cyclization. Nature Communications, 2021, 12, 2994.	12.8	13
6	Kinetic Selection in the Outâ€ofâ€Equilibrium Autocatalytic Reaction Networks that Produce Macrocyclic Peptides. Angewandte Chemie - International Edition, 2021, 60, 20366-20375.	13.8	9
7	Kinetic Selection in the Outâ€ofâ€Equilibrium Autocatalytic Reaction Networks that Produce Macrocyclic Peptides. Angewandte Chemie, 2021, 133, 20529-20538.	2.0	0
8	Mathematical Analysis of a Prototypical Autocatalytic Reaction Network. Life, 2019, 9, 42.	2.4	2
9	Robustness, Entrainment, and Hybridization in Dissipative Molecular Networks, and the Origin of Life. Journal of the American Chemical Society, 2019, 141, 8289-8295.	13.7	44
10	Photocatalytic Regulation of an Autocatalytic Wave of Spatially Propagating Enzymatic Reactions. ChemCatChem, 2018, 10, 1798-1803.	3.7	9
11	Fourâ€Variable Model of an Enzymatic Oscillator Based on Trypsin. Israel Journal of Chemistry, 2018, 58, 781-786.	2.3	5
12	Autocatalytic Cycles in a Copper-Catalyzed Azideâ€“Alkyne Cycloaddition Reaction. Journal of the American Chemical Society, 2018, 140, 10221-10232.	13.7	51
13	Magnetic Levitation To Characterize the Kinetics of Free-Radical Polymerization. Journal of the American Chemical Society, 2017, 139, 18688-18697.	13.7	43
14	Tunneling across SAMs Containing Oligophenyl Groups. Journal of Physical Chemistry C, 2016, 120, 11331-11337.	3.1	43
15	Autocatalytic, bistable, oscillatory networks of biologically relevant organic reactions. Nature, 2016, 537, 656-660.	27.8	243
16	Field-induced conductance switching by charge-state alternation in organometallic single-molecule junctions. Nature Nanotechnology, 2016, 11, 170-176.	31.5	155
17	Rational design of functional and tunable oscillating enzymatic networks. Nature Chemistry, 2015, 7, 160-165.	13.6	219
18	Influence of Molecular Structure on the Properties of Out-of-Equilibrium Oscillating Enzymatic Reaction Networks. Journal of the American Chemical Society, 2015, 137, 12415-12420.	13.7	31

#	Article	IF	Citations
19	Threshold Sensing through a Synthetic Enzymatic Reactionâ€“Diffusion Network. Angewandte Chemie - International Edition, 2014, 53, 8066-8069.	13.8	46
20	Fluorescent hydrogels for studying Ca2+-dependent reactionâ€“diffusion processes. Chemical Communications, 2014, 50, 3089-3092.	4.1	3
21	Probing cellular heterogeneity in cytokine-secreting immune cells using droplet-based microfluidics. Lab on A Chip, 2013, 13, 4740.	6.0	204
22	Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. Biophysical Journal, 2013, 105, 1057-1066.	0.5	25
23	Syntheses, structures, and spectroscopy of mono- and polynuclear lanthanide complexes containing 4-acyl-pyrazolones and diphosphineoxide. Inorganica Chimica Acta, 2010, 363, 4038-4047.	2.4	39
24	Electronic Communication in Dinuclear C₄-Bridged Tungsten Complexes. Journal of the American Chemical Society, 2010, 132, 3115-3127.	13.7	63
25	An Iron-Capped Metalâ˜Organic Polyyne: {[Fe](Câ‰¡C)₂[W]â‰¡CCâ‰¡CCâ‰¡[W](Câ‰¡C)₂[Fe]}. Journal of the American Chemical Society, 2010, 132, 7584-7585.	13.7	31
26	[W(CO)(dppe)2] Cumulenylidene and Acetylide Complexes Accessed via Stannylated Acetylenes and Butadiynes. Organometallics, 2010, 29, 6321-6328.	2.3	5
27	New Helical Zinc Complexes with Schiff Base Derivatives of Î²â€Diketonates or Î²â€Keto Esters and Ethylenediamine. European Journal of Inorganic Chemistry, 2009, 2009, 3467-3474.	2.0	21
28	Selfâ€Coupling of a 4â€Hâ€Butatrienylidene Tungsten Complex. Angewandte Chemie - International Edition, 2009, 48, 5203-5206.	13.8	14
29	Role of the Ancillary Ligand N,N-Dimethylaminoethanol in the Sensitization of Eu^{III} and Tb^{III} Luminescence in Dimeric Î²-Diketonates. Journal of Physical Chemistry A, 2008, 112, 3614-3626.	2.5	102
30	First direct assembly of molecular helical complexes into a coordination polymer. Chemical Communications, 2008, , 1992.	4.1	26
31	5-Nitroaminotetrazole as a building block for extended network structures: Syntheses and crystal structures of a number of heavy metal derivatives. Polyhedron, 2007, 26, 4899-4907.	2.2	16
32	A new rare-earth metal acylpyrazolonate containing the Zundel ion stabilized by strong hydrogen bonding. Inorganic Chemistry Communication, 2006, 9, 634-637.	3.9	20
33	Syntheses, spectroscopic characterization and X-ray structural studies of lanthanide complexes with adamantyl substituted 4-acylpyrazol-5-one. Inorganica Chimica Acta, 2006, 359, 4063-4070.	2.4	17
34	Crystal structures of tin(IV) chloride hydrates. Mendeleev Communications, 2005, 15, 205-207.	1.6	8
35	Crystal Structures of Tin(IV) Chloride Hydrates.. ChemInform, 2005, 36, no.	0.0	0
36	The role of reaction medium on the coordination environment of terbium in complexes with 4-acylpyrazol-5-ones. Inorganic Chemistry Communication, 2003, 6, 1423-1425.	3.9	11