Sergei N Smirnov

List of Publications by Year
in descending order

75	6,259	126907	74163
papers	citations	33 h-index	75 g-index

76	76	76	9711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New perspectives in SWCNT applications: Tuball SWCNTs. Part 1. Tuball by itselfâ€"All you need to know about it. Carbon Trends, 2022, 8, 100175.	3.0	20
2	New Perspectives in SWCNT Applications: Tuball SWCNTs. Part 2. New Composite Materials through Augmentation with Tuball.. Carbon Trends, 2022, 8, 100176.	3.0	8
3	Unique role of dimeric carbon precursors in graphene growth by chemical vapor deposition. Carbon Trends, 2021, 5, 100093.	3.0	2
4	Mixed Silane Monolayers Reveal the Disparity of Biotin and Folate in Targeting Cancer Cells. ACS Applied Nano Materials, 2020, 3, 5372-5380.	5.0	4
5	Symmetry Effects in Photoinduced Electron Transfer in Chlorinâ€Quinone Dyads: Adiabatic Suppression in the Marcus Inverted Region. Chemistry - A European Journal, 2020, 26, 17120-17127.	3.3	4
6	Exclusively Proton Conductive Membranes Based on Reduced Graphene Oxide Polymer Composites. ACS Nano, 2019, 13, 13136-13143.	14.6	19
7	Ionic Conductance through Graphene: Assessing Its Applicability as a Proton Selective Membrane. ACS Nano, 2019, 13, 12109-12119.	14.6	28
8	Enhancing the Cooperative Catalytic Effect in Ni/Co Hydr(oxy)oxide Porous Electrodes for Overall Water Splitting and Glucose Sensing. ACS Sustainable Chemistry and Engineering, 2019, 7, 11303-11312.	6.7	23
9	Synergistic effect of iron diselenide decorated multi-walled carbon nanotubes for enhanced heterogeneous electron transfer and electrochemical hydrogen evolution. Electrochimica Acta, 2018, 270, 138-146.	5.2	17
10	Evolutionary selection growth of two-dimensional materials on polycrystalline substrates. Nature Materials, 2018, 17, 318-322.	27.5	204
11	Anisotropic Etching of Hexagonal Boron Nitride and Graphene: Question of Edge Terminations. Nano Letters, 2017, 17, 7306-7314.	9.1	54
12	Simple and Versatile Detection of Viruses Using Anodized Alumina Membranes. ACS Sensors, 2016, 1, 488-492.	7.8	20
13	Synthesis of Hexagonal Boron Nitride Monolayer: Control of Nucleation and Crystal Morphology. Chemistry of Materials, 2015, 27, 8041-8047.	6.7	202
14	Porous TiO2 Conformal Coating on Carbon Nanotubes as Energy Storage Materials. Electrochimica Acta, 2015, 169, 73-81.	5.2	49
15	Strong and Electrically Conductive Graphene-Based Composite Fibers and Laminates. ACS Applied Materials & Interfaces, 2015, 7, 10702-10709.	8.0	63
16	Water desalination using nanoporous single-layer graphene. Nature Nanotechnology, 2015, 10, 459-464.	31.5	1,372
17	Evaluation of the Catalytic Activity and Cytotoxicity of Palladium Nanocubes: The Role of Oxygen. ACS Applied Materials & Interfaces, 2015, 7, 9364-9371.	8.0	23
18	Titanium Oxynitride Nanoparticles Anchored on Carbon Nanotubes as Energy Storage Materials. ACS Applied Materials & Interfaces, 2015, 7, 24212-24217.	8.0	35

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19	Instant gelation synthesis of 3D porous MoS2@C nanocomposites for lithium ion batteries. Nanoscale, 2014, 6, 3664-3669.	5.6	58
20	Direct growth of mesoporous anatase TiO₂ on nickel foam by soft template method as binder-free anode for lithium-ion batteries. RSC Advances, 2014, 4, 48938-48942.	3.6	13
21	A facile hydrothermal route to iron(III) oxide with conductive additives as composite anode for lithium ion batteries. Journal of Power Sources, 2014, 259, 227-232.	7.8	33
22	Graphene Nucleation Density on Copper: Fundamental Role of Background Pressure. Journal of Physical Chemistry C, 2013, 117, 18919-18926.	3.1	179
23	Surface modification of graphene nanopores for protein translocation. Nanotechnology, 2013, 24, 495102.	2.6	44
24	Bismuth oxide: a new lithium-ion battery anode. Journal of Materials Chemistry A, 2013, 1, 12123.	10.3	132
25	Large scale atmospheric pressure chemical vapor deposition of graphene. Carbon, 2013, 54, 58-67.	10.3	241
26	Reduced Graphene Oxide Wrapped FeS Nanocomposite for Lithium-Ion Battery Anode with Improved Performance. ACS Applied Materials & Interfaces, 2013, 5, 5330-5335.	8.0	199
27	SBA-15 confined synthesis of TiNb2O7 nanoparticles for lithium-ion batteries. Nanoscale, 2013, 5, 11102.	5.6	119
28	pH Valve Based on Hydrophobicity Switching. Chemistry of Materials, 2011, 23, 3601-3605.	6.7	44
29	Electrical and thermal conductivity of low temperature CVD graphene: the effect of disorder. Nanotechnology, 2011, 22, 275716.	2.6	132
30	Voltage-Gated Hydrophobic Nanopores. ACS Nano, 2011, 5, 7453-7461.	14.6	105
31	Role of Hydrogen in Chemical Vapor Deposition Growth of Large Single-Crystal Graphene. ACS Nano, 2011, 5, 6069-6076.	14.6	792
32	Single Molecule Conductance of Bipyridyl Ethynes: The Role of Surface Binding Modesâ€. Journal of Physical Chemistry B, 2010, 114, 14189-14193.	2.6	5
33	Water Confinement in Hydrophobic Nanopores. Pressure-Induced Wetting and Drying. ACS Nano, 2010, 4, 5069-5075.	14.6	63
34	Nanoporous Sensors. ECS Transactions, 2010, 33, 17-20.	0.5	1
35	Biochemically Responsive Smart Surface. ACS Applied Materials & Interfaces, 2009, 1, 768-774.	8.0	21
36	Electron Transfer in Platinum(II) Diimine-Centered Triads: Mechanistic Insights from Photoinduced Transient Displacement Current Measurements. Journal of Physical Chemistry A, 2009, 113, 6430-6436.	2.5	11

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37	Label-Free DNA Sensor Based on Surface Charge Modulated Ionic Conductance. ACS Nano, 2009, 3, 1004-1010.	14.6	101
38	Nanofluidic Ionic Diodes. Comparison of Analytical and Numerical Solutions. ACS Nano, 2008, 2, 1589-1602.	14.6	221
39	Ionic Selectivity of Single Nanochannels. Nano Letters, 2008, 8, 1978-1985.	9.1	387
40	Smart Nanoporous Membranes. ECS Transactions, 2007, 3, 23-29.	0.5	4
41	Electrical Conductance of Hydrophobic Membranes or What Happens below the Surface. Langmuir, 2007, 23, 7784-7792.	3.5	17
42	Control of Nanopore Wetting by a Photochromic Spiropyran: A Light-Controlled Valve and Electrical Switch. Nano Letters, 2006, 6, 1013-1017.	9.1	233
43	Hydrothermally shrunk alumina nanopores and their application to DNA sensing. Analyst, The, 2006, 131, 1248.	3.5	49
44	Surface-Assisted Transient Displacement Charge Technique. II. Effect of Gases on Photoinduced Charge Transfer in Self-Assembled Monolayers. Journal of Physical Chemistry B, 2006, 110, 17941-17948.	2.6	1
45	Surface-Assisted Transient Displacement Charge Technique. I. Photoinduced Charge Transfer in Self-Assembled Monolayers. Journal of Physical Chemistry B, 2006, 110, 17931-17940.	2.6	4
46	Stability of silane modifiers on alumina nanoporous membranes. Journal of Membrane Science, 2006, 281, 587-591.	8.2	51
47	Application of anodized aluminum in fluorescence detection of biological species. Analytical and Bioanalytical Chemistry, 2006, 385, 954-958.	3.7	46
48	Sensing DNA Hybridization via Ionic Conductance through a Nanoporous Electrode. Langmuir, 2005, 21, 4776-4778.	3.5	128
49	â€œDirectâ€•Detection and Separation of DNA Using Nanoporous Alumina Filters. Langmuir, 2004, 20, 9913-9915.	3.5	119
50	Characterization of the Giant Transient Dipole Generated by Photoinduced Electron Transfer in a Caroteneâ^'Porphyrinâ^'Fullerene Molecular Triad. Journal of Physical Chemistry A, 2003, 107, 7567-7573.	2.5	48
51	Electric Polarization of Dilute Polar Solutions:Â Revised Treatment for Arbitrary Shaped Molecules. Journal of Physical Chemistry A, 2003, 107, 7561-7566.	2.5	5
52	Long-lived photoinduced charge transfer state of synthetically affable porphyrin-fullerene dyads. Journal of Porphyrins and Phthalocyanines, 2003, 07, 651-666.	0.8	13
53	Radical Induced Impeding of Charge Recombination. Journal of Physical Chemistry B, 2002, 106, 8657-8666.	2.6	16
54	Unusual Role of Oxygen in Electron-Transfer Processes. Journal of the American Chemical Society, 2002, 124, 4212-4213.	13.7	18

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55	Effect of Water on Silanization of Silica by Trimethoxysilanes. Langmuir, 2002, 18, 3181-3184.	3.5	159
56	Mechanism of TMPD photolysis in alcohols. Spin-dependent ion recombination and photoconductivity. Physical Chemistry Chemical Physics, 2001, 3, 204-212.	2.8	13
57	Surface Assisted Intermolecular Interactions in Self-Assembled Coumarin Submonolayers. Langmuir, 2001, 17, 7593-7599.	3.5	32
58	Larger than Expected Free Ion Yields from the Photoexcited trans-Stilbene/Fumaronitrile CT Complex in a Variety of Solvents. Journal of Physical Chemistry A, 1998, 102, 6385-6389.	2.5	7
59	Exciplex Dipole Moments:â€‰ Cyanoanthracene Acceptors and Methyl-Substituted Benzene Donors. Journal of Physical Chemistry A, 1998, 102, 6558-6564.	2.5	15
60	Advances in the transient dc photocurrent technique for excited state dipole moment measurements. Review of Scientific Instruments, 1998, 69, 2875-2887.	1.3	55
61	Singlet Biradical â†' Singlet Zwitterion Optical Transition in a Twisted Olefin. Journal of the American Chemical Society, 1996, 118, 8981-8982.	13.7	23
62	Giant Dipole Moment in a Triad System. Mechanisms of Anisotropic Photoresponse in the Transient dc Conductivity of Dipolar Solutes. The Journal of Physical Chemistry, 1996, 100, 12329-12336.	2.9	16
63	Exciplex dipole moments: excited cyanoanthracenes in neat methylbenzene solvents. Chemical Physics Letters, 1996, 257, 89-92.	2.6	9
64	Photoinduced Charge Separation. Dipoles, Exciplexes and Ion Pairs. Molecular Crystals and Liquid Crystals, 1996, 283, 243-248.	0.3	1
65	Charge Separation in Triplet C60/TMPD Exciplexes. The Journal of Physical Chemistry, 1994, 98, 5661-5664.	2.9	14
66	Light polarization effects in the transient dc conductivity response to excitation of dipolar solutes. Chemical Physics Letters, 1994, 217, 167-172.	2.6	15
67	Transient Displacement Currents Generated by Excited-State Dipole Moments in Liquids. The Journal of Physical Chemistry, 1994, 98, 1953-1961.	2.9	17
68	Induced flux creep as a novel technique for detecting alternating magnetic fields. Physica C: Superconductivity and Its Applications, 1991, 182, 261-268.	1.2	2
69	Induced flux creep and detection of alternating magnetic fields in HTSC films. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 160, 298-300.	2.1	1
70	Determination of the frequency of excess electron trap to trap migration in saturated hydrocarbons by an OD ESR technique. Chemical Physics, 1990, 144, 241-248.	1.9	4
71	Application of the OD ESR method for studying the molecular structure of excess electron trap in Î³-irradiated hydrocarbons. Chemical Physics, 1988, 124, 81-89.	1.9	5
72	OD ESR studies on the interaction of electrons with polar additions in liquid saturated hydrocarbons. Chemical Physics, 1986, 109, 321-329.	1.9	9

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73	OD ESR signals of excess electrons in liquid hydrocarbons depending on the geminate recombination parameters, theory and experiment. Chemical Physics, 1985, 92, 381-387.	1.9	12
74	Optically detected electron spin resonance studies of electrons and holes involved in geminate recombination in non-polar solutions. Faraday Discussions of the Chemical Society, 1984, 78, 289.	2.2	35
75	Biosensing with Nanopores. , 0, , 457-490.		0