Svyatoslav Kondrat

List of Publications by Year
in descending order

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59 papers	2,555 citations	236925 25 h-index	189892 50 g-index
64 all docs	64 docs citations	64 times ranked	2490 citing authors

#	Article	IF	Citations
1	Effect of pore size and its dispersity on the energy storage in nanoporous supercapacitors. Energy and Environmental Science, 2012, 5, 6474.	30.8	431
2	Accelerating charging dynamics in subnanometre pores. Nature Materials, 2014, 13, 387-393.	27.5	303
3	A superionic state in nano-porous double-layer capacitors: insights from Monte Carlo simulations. Physical Chemistry Chemical Physics, 2011, 13, 11359.	2.8	249
4	Superionic state in double-layer capacitors with nanoporous electrodes. Journal of Physics Condensed Matter, 2011, 23, 022201.	1.8	192
5	Pressing a spring: what does it take to maximize the energy storage in nanoporous supercapacitors?. Nanoscale Horizons, 2016, 1, 45-52.	8.0	105
6	Charging Dynamics and Optimization of Nanoporous Supercapacitors. Journal of Physical Chemistry C, 2013, 117, 12399-12406.	3.1	81
7	Charge Me Slowly, I Am in a Hurry: Optimizing Chargeâ€“Discharge Cycles in Nanoporous Supercapacitors. ACS Nano, 2018, 12, 9733-9741.	14.6	80
8	Single-File Charge Storage in Conducting Nanopores. Physical Review Letters, 2014, 113, 048701.	7.8	60
9	Can enzyme proximity accelerate cascade reactions?. Scientific Reports, 2019, 9, 455.	3.3	57
10	How to speed up ion transport in nanopores. Nature Communications, 2020, 11, 6085.	12.8	57
11	Dynamics of Ion Transport in Ionic Liquids. Physical Review Letters, 2015, 115, 106101.	7.8	54
12	Critical Casimir effect for colloids close to chemically patterned substrates. Journal of Chemical Physics, 2010, 133, 074702.	3.0	48
13	Macromolecular Crowding: How Shape and Interactions Affect Diffusion. Journal of Physical Chemistry B, 2020, 124, 7537-7543.	2.6	45
14	Charging dynamics of supercapacitors with narrow cylindrical nanopores. Nanotechnology, 2014, 25, 315401.	2.6	41
15	Does metabolite channeling accelerate enzyme-catalyzed cascade reactions?. PLoS ONE, 2017, 12, e0172673.	2.5	41
16	Normal and lateral critical Casimir forces between colloids and patterned substrates. Europhysics Letters, 2009, 88, 40004.	2.0	40
17	Critical Casimir interaction of ellipsoidal colloids with a planar wall. Journal of Chemical Physics, 2009, 131, 204902.	3.0	37
18	Phase behavior of ionic liquid crystals. Journal of Chemical Physics, 2010, 132, .	3.0	37

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19	The effect of dielectric permittivity on the capacitance of nanoporous electrodes. Electrochemistry Communications, 2013, 34, 348-350.	4.7	34
20	The effect of composition on diffusion of macromolecules in a crowded environment. Physical Biology, 2015, 12, 046003.	1.8	32
21	Charging Ultrananoporous Electrodes with Size-Asymmetric Ions Assisted by Apolar Solvent. Journal of Physical Chemistry C, 2016, 120, 16042-16050.	3.1	32
22	Critical Casimir interactions around the consolute point of a binary solvent. Soft Matter, 2014, 10, 5510-5522.	2.7	30
23	Bulk ionic screening lengths from extremely large-scale molecular dynamics simulations. Chemical Communications, 2020, 56, 15635-15638.	4.1	30
24	The effect of finite pore length on ion structure and charging. Journal of Chemical Physics, 2017, 147, 104708.	3.0	29
25	Connections Matter: On the Importance of Pore Percolation for Nanoporous Supercapacitors. ACS Applied Energy Materials, 2019, 2, 5386-5390.	5.1	29
26	Electrical Double Layers Close to Ionic Liquidâ€“Solvent Demixing. Journal of Physical Chemistry C, 2019, 123, 1596-1601.	3.1	26
27	Orientational phase transition and the solvation force in a nematic liquid crystal confined between inhomogeneous substrates. European Physical Journal E, 2003, 10, 163-170.	1.6	23
28	Effective free-energy method for nematic liquid crystals in contact with structured substrates. Physical Review E, 2007, 76, 051701.	2.1	21
29	Capacitance-Power-Hysteresis Trilemma in Nanoporous Supercapacitors. Physical Review X, 2016, 6, .	8.9	21
30	Ionic screening in bulk and under confinement. Journal of Chemical Physics, 2021, 155, 204501.	3.0	19
31	Phase behaviour and structure of a superionic liquid in nonpolarized nanoconfinement. Journal of Physics Condensed Matter, 2016, 28, 464007.	1.8	18
32	Phase behavior of a nematic liquid crystal in contact with a chemically and geometrically structured substrate. Physical Review E, 2005, 72, 011701.	2.1	17
33	Conformation-changing enzymes and macromolecular crowding. Physical Chemistry Chemical Physics, 2021, 23, 9065-9069.	2.8	17
34	Brownian dynamics assessment of enhanced diffusion exhibited by â€˜fluctuating-dumbbell enzymesâ€™. Physical Chemistry Chemical Physics, 2019, 21, 18811-18815.	2.8	16
35	Feeling Your Neighbors across the Walls: How Interpore Ionic Interactions Affect Capacitive Energy Storage. Journal of Physical Chemistry Letters, 2019, 10, 4523-4527.	4.6	14
36	Nematic liquid crystal in contact with periodically patterned surfaces. Liquid Crystals, 2005, 32, 95-105.	2.2	12

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37	Effect of proximity to ionic liquid-solvent demixing on electrical double layers. Journal of Molecular Liquids, 2019, 294, 111368.	4.9	12
38	Random-Alloy Model for the Conductivity of Ionic Liquidâ€“Solvent Mixtures. Journal of Physical Chemistry C, 2020, 124, 11754-11759.	3.1	12
39	Critical adsorption on nonspherical colloidal particles. Journal of Chemical Physics, 2007, 126, 174902.	3.0	11
40	Superionic Liquids in Conducting Nanoslits: Insights from Theory and Simulations. Journal of Physical Chemistry C, 2021, 125, 4968-4976.	3.1	11
41	Symmetrizing cathode-anode response to speed up charging of nanoporous supercapacitors. Green Energy and Environment, 2022, 7, 95-104.	8.7	10
42	Nematic mediated interaction between periodic wallsâ€”strong anchoring limit. Journal of Molecular Liquids, 2004, 112, 61-69.	4.9	9
43	Superionic liquids in conducting nanoslits: A variety of phase transitions and ensuing charging behavior. Journal of Chemical Physics, 2019, 151, 184105.	3.0	9
44	Structure, dynamics and conductivities of ionic liquid-alcohol mixtures. Journal of Molecular Liquids, 2022, 355, 118955.	4.9	9
45	Discrete-continuous reaction-diffusion model with mobile point-like sources and sinks. European Physical Journal E, 2016, 39, 11.	1.6	8
46	Nonadditive interactions and phase transitions in strongly confined colloidal systems. Soft Matter, 2018, 14, 586-596.	2.7	8
47	Controlled deposition of nanoparticles with critical Casimir forces. Nanoscale Horizons, 2021, 6, 751-758.	8.0	8
48	Capacitive energy storage in single-file pores: Exactly solvable models and simulations. Journal of Chemical Physics, 2021, 155, 174112.	3.0	8
49	Enzyme co-localisation: Mechanisms and benefits. Current Research in Chemical Biology, 2022, , 100031.	2.9	8
50	How macromolecules softness affects diffusion under crowding. Soft Matter, 2022, 18, 5366-5370.	2.7	8
51	Debye vs. Casimir: controlling the structure of charged nanoparticles deposited on a substrate. Nanoscale, 2021, 13, 6475-6488.	5.6	6
52	Hydrodynamic Properties of Polymers Screening the Electrokinetic Flow: Insights from a Computational Study. Polymers, 2019, 11, 1038.	4.5	4
53	Bridging transitions and capillary forces for colloids in a slit. Journal of Chemical Physics, 2020, 153, 014901.	3.0	4
54	Capillary Ionization and Jumps of Capacitive Energy Stored in Mesopores. Journal of Physical Chemistry C, 2021, 125, 10243-10249.	3.1	4

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55	Ionic liquids in conducting nanoslits: how important is the range of the screened electrostatic interactions?. Journal of Physics Condensed Matter, 2022, 34, 26LT01.	1.8	4
56	Probing interface localizationâ€“delocalization transitions by colloids. Journal of Physics Condensed Matter, 2018, 30, 414002.	1.8	3
57	Two tributaries of the electrical double layer. Journal of Physics Condensed Matter, 2016, 28, 460301.	1.8	1
58	The reference system for the highly asymmetric electrolyte solutions: The analytical treatment. Journal of Molecular Liquids, 2000, 88, 65-75.	4.9	0
59	Connection of Landau-Ginsburg models with continuous microscopic approach for self-assembling systems. Journal of Molecular Liquids, 2001, 92, 125-130.	4.9	0