Alexander J Pak

List of Publications by Year
in descending order

34	1,819	304602	330025
papers	citations	22 h-index	37 g-index

44	44	44	2273
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the Origin of the Enhanced Supercapacitor Performance of Nitrogen-Doped Graphene. Journal of Physical Chemistry C, 2013, 117, 5610-5616.	1.5	230
2	A Computational Study of the Interfacial Structure and Capacitance of Graphene in [BMIM][PF₆] Ionic Liquid. Journal of the Electrochemical Society, 2013, 160, A1-A10.	1.3	229
3	A multiscale coarse-grained model of the SARS-CoV-2 virion. Biophysical Journal, 2021, 120, 1097-1104.	0.2	139
4	Advances in coarse-grained modeling of macromolecular complexes. Current Opinion in Structural Biology, 2018, 52, 119-126.	2.6	100
5	Thickness-Dependent Dielectric Constant of Few-Layer In₂Se₃ Nanoflakes. Nano Letters, 2015, 15, 8136-8140.	4.5	99
6	Immature HIV-1 lattice assembly dynamics are regulated by scaffolding from nucleic acid and the plasma membrane. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10056-E10065.	3.3	86
7	Tailoring the performance of graphene-based supercapacitors using topological defects: A theoretical assessment. Carbon, 2014, 68, 734-741.	5.4	78
8	Relative contributions of quantum and double layer capacitance to the supercapacitor performance of carbon nanotubes in an ionic liquid. Physical Chemistry Chemical Physics, 2013, 15, 19741-19747.	1.3	68
9	Impact of Graphene Edges on Enhancing the Performance of Electrochemical Double Layer Capacitors. Journal of Physical Chemistry C, 2014, 118, 21770-21777.	1.5	54
10	Curvature Effects on the Interfacial Capacitance of Carbon Nanotubes in an Ionic Liquid. Journal of Physical Chemistry C, 2013, 117, 23539-23546.	1.5	53
11	Understanding Missing Entropy in Coarse-Grained Systems: Addressing Issues of Representability and Transferability. Journal of Physical Chemistry Letters, 2019, 10, 4549-4557.	2.1	51
12	TRIM5Î± self-assembly and compartmentalization of the HIV-1 viral capsid. Nature Communications, 2020, 11, 1307.	5.8	51
13	The Bright Future for Electrode Materials of Energy Devices: Highly Conductive Porous Na-Embedded Carbon. Nano Letters, 2016, 16, 8029-8033.	4.5	50
14	On the influence of polarization effects in predicting the interfacial structure and capacitance of graphene-like electrodes in ionic liquids. Journal of Chemical Physics, 2015, 142, 024701.	1.2	44
15	A helical assembly of human ESCRT-I scaffolds reverse-topology membrane scission. Nature Structural and Molecular Biology, 2020, 27, 570-580.	3.6	44
16	Large Capacitance Enhancement Induced by Metal-Doping in Graphene-Based Supercapacitors: A First-Principles-Based Assessment. ACS Applied Materials & Interfaces, 2014, 6, 12168-12176.	4.0	40
17	Immature HIV-1 assembles from Gag dimers leaving partial hexamers at lattice edges as potential substrates for proteolytic maturation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	40
18	Off-Pathway Assembly: A Broad-Spectrum Mechanism of Action for Drugs That Undermine Controlled HIV-1 Viral Capsid Formation. Journal of the American Chemical Society, 2019, 141, 10214-10224.	6.6	38

#	Article	IF	Citations
19	Charging Rate Dependence of Ion Migration and Stagnation in Ionic-Liquid-Filled Carbon Nanopores. Journal of Physical Chemistry C, 2016, 120, 24560-24567.	1.5	35
20	Cooperative multivalent receptor binding promotes exposure of the SARS-CoV-2 fusion machinery core. Nature Communications, 2022, 13, 1002.	5.8	30
21	Unusual Organization of I-BAR Proteins on Tubular and Vesicular Membranes. Biophysical Journal, 2019, 117, 553-562.	0.2	27
22	Systematic Coarse-Grained Lipid Force Fields with Semiexplicit Solvation via Virtual Sites. Journal of Chemical Theory and Computation, 2019, 15, 2087-2100.	2.3	26
23	Simultaneous optimization of size and short-term operation for an RO plant. Desalination, 2012, 301, 42-52.	4.0	23
24	Theoretical Analysis of Thermal Transport in Graphene Supported on Hexagonal Boron Nitride: The Importance of Strong Adhesion Due to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï€</mml:mi></mml:math>-Bond Polarization. Physical Review Applied, 2016, 6, .	1.5	23
25	A new one-site coarse-grained model for water: Bottom-up many-body projected water (BUMPer). I. General theory and model. Journal of Chemical Physics, 2021, 154, 044104.	1.2	21
26	Molecular Insights into the Complex Relationship between Capacitance and Pore Morphology in Nanoporous Carbon-based Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 34659-34667.	4.0	19
27	What is the thermal conductivity limit of silicon germanium alloys?. Physical Chemistry Chemical Physics, 2016, 18, 19544-19548.	1.3	18
28	Lipid-Composition-Mediated Forces Can Stabilize Tubular Assemblies of I-BAR Proteins. Biophysical Journal, 2021, 120, 46-54.	0.2	18
29	A new one-site coarse-grained model for water: Bottom-up many-body projected water (BUMPer). II. Temperature transferability and structural properties at low temperature. Journal of Chemical Physics, 2021, 154, 044105.	1.2	17
30	Preservation of HIV-1 Gag Helical Bundle Symmetry by Bevirimat Is Central to Maturation Inhibition. Journal of the American Chemical Society, 2021, 143, 19137-19148.	6.6	12
31	Inositol Hexakisphosphate (IP6) Accelerates Immature HIV-1 Gag Protein Assembly toward Kinetically Trapped Morphologies. Journal of the American Chemical Society, 2022, 144, 10417-10428.	6.6	12
32	Principal Role of Contact-Force Distribution in Determining the Thermal Conductivity of Supported Graphene. Physical Review Applied, 2015, 4, .	1.5	8
33	On the Importance of Regulating Hydroxyl Coverage on the Basal Plane of Graphene Oxide for Supercapacitors. ChemElectroChem, 2016, 3, 741-748.	1.7	6
34	Fundamentals of Capacitive Charge Storage in Carbon-Based Supercapacitors. Springer Series in Materials Science, 2021, , 559-586.	0.4	0