Hu Qiu

List of Publications by Year
in descending order

39 papers	1,153 citations	361045 20 h-index	395343 33 g-index
40 all docs	40 docs citations	40 times ranked	1723 citing authors

#	Article	IF	Citations
1	An analog of Friedel oscillations in nanoconfined water. National Science Review, 2022, 9, .	4.6	5
2	Giant mechanocaloric effect of nanoconfined water near room temperature. Cell Reports Physical Science, 2022, , 100822.	2.8	5
3	Ion Hydration under Nanoscale Confinement: Dimensionality and Scale Effects. Journal of Physical Chemistry Letters, 2022, 13, 4815-4822.	2.1	8
4	A Deep Neural Network Potential for Water Confined in Graphene Nanocapillaries. Journal of Physical Chemistry C, 2022, 126, 10546-10553.	1.5	7
5	Phase-dependent friction of nanoconfined water meniscus. Nanoscale, 2021, 13, 3201-3207.	2.8	3
6	Edge premelting of two-dimensional ices. Journal of Chemical Physics, 2021, 155, 044706.	1.2	2
7	Ultrahigh hydrogen and nitrogen selectivity achieved by the nanoporous graphene with a precise nanopore. Carbon, 2021, 182, 628-633.	5.4	4
8	Nanopores in Graphene and Other 2D Materials: A Decadeâ€™s Journey toward Sequencing. ACS Nano, 2021, 15, 18848-18864.	7.3	45
9	Two-dimensional material nanopores as biosensors: Recent progress based on computations and simulations. Chinese Science Bulletin, 2021, 66, 657-673.	0.4	1
10	Molecular Insights into Distinct Detection Properties of Î±-Hemolysin, MspA, CsgG, and Aerolysin Nanopore Sensors. Journal of Physical Chemistry B, 2020, 124, 1611-1618.	1.2	20
11	Electrolytes under Inhomogeneous Nanoconfinement: Water Structuring-Mediated Local Ion Accumulation. Journal of Physical Chemistry Letters, 2019, 10, 4895-4902.	2.1	6
12	Phase Diagram of Nanoscale Water on Solid Surfaces with Various Wettabilities. Journal of Physical Chemistry Letters, 2019, 10, 6316-6323.	2.1	11
13	Heterogeneous graphene oxide membrane for rectified ion transport. Nanoscale, 2019, 11, 1313-1318.	2.8	30
14	Graphynes for Water Desalination and Gas Separation. Advanced Materials, 2019, 31, e1803772.	11.1	75
15	Soliton-like propagation of dipole reorientation in confined single-file water chains. Nanoscale, 2019, 11, 19387-19392.	2.8	1
16	Anomalous cation diffusion in salt-doped confined bilayer ice. Nanoscale, 2018, 10, 8962-8968.	2.8	16
17	Electrically Tunable Ion Selectivity of Charged Nanopores. Journal of Physical Chemistry C, 2018, 122, 29380-29385.	1.5	7
18	Identification of Essential Sensitive Regions of the Aerolysin Nanopore for Single Oligonucleotide Analysis. Analytical Chemistry, 2018, 90, 7790-7794.	3.2	61

#	Article	IF	Citations
19	Detection and mapping of DNA methylation with 2D material nanopores. Npj 2D Materials and Applications, 2017, 1, .	3.9	53
20	Geometrical Effect in 2D Nanopores. Nano Letters, 2017, 17, 4223-4230.	4.5	87
21	Fabrication and microwave absorption performances of hollow-structure Fe3O4/PANI microspheres. Journal of Materials Science: Materials in Electronics, 2017, 28, 9279-9288.	1.1	26
22	Graphene Nanopores for Electronic Recognition of DNA Methylation. Journal of Physical Chemistry B, 2017, 121, 3757-3763.	1.2	22
23	Insertion of Neurotransmitters into a Lipid Bilayer Membrane and Its Implication on Membrane Stability: Aâ€...Molecular Dynamics Study. ChemPhysChem, 2017, 18, 626-633.	1.0	5
24	Detection of methylation on dsDNA using nanopores in a MoS₂ membrane. Nanoscale, 2017, 9, 14836-14845.	2.8	34
25	Wettability of Supported Monolayer Hexagonal Boron Nitride in Air. Advanced Functional Materials, 2017, 27, 1603181.	7.8	54
26	Electrically Tunable Quenching of DNA Fluctuations in Biased Solid-State Nanopores. ACS Nano, 2016, 10, 4482-4488.	7.3	22
27	Single-Site Resolution Detection of Methylation in DNA with Graphene Nanopores. Biophysical Journal, 2016, 110, 654a.	0.2	2
28	Stepwise Transport of Stretched ssDNA Through Graphene Nanopores. Biophysical Journal, 2016, 110, 508a.	0.2	2
29	Water in Inhomogeneous Nanoconfinement: Coexistence of Multilayered Liquid and Transition to Ice Nanoribbons. ACS Nano, 2015, 9, 9877-9884.	7.3	54
30	Intrinsic Stepwise Translocation of Stretched ssDNA in Graphene Nanopores. Nano Letters, 2015, 15, 8322-8330.	4.5	47
31	Friction of low-dimensional nanomaterial systems. Friction, 2014, 2, 209-225.	3.4	70
32	Microstructures and mechanical properties of fiber cells from Echinocactus grusonii cactus spine. Science China Technological Sciences, 2014, 57, 706-712.	2.0	4
33	Exceptionally fast water desalination at complete salt rejection by pristine graphyne monolayers. Nanotechnology, 2013, 24, 505720.	1.3	126
34	Electromelting of Confined Monolayer Ice. Physical Review Letters, 2013, 110, 195701.	2.9	99
35	Detecting ssDNA at single-nucleotide resolution by sub-2-nanometer pore in monoatomic graphene: A molecular dynamics study. Applied Physics Letters, 2012, 100, 083106.	1.5	28
36	Ion solvation and structural stability in a sodium channel investigated by molecular dynamics calculations. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2529-2535.	1.4	34

#	Article	IF	Citations
37	Vibrating carbon nanotubes as water pumps. Nano Research, 2011, 4, 284-289.	5.8	51
38	Dynamic and energetic mechanisms for the distinct permeation rate in AQP1 and AQP0. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 318-326.	1.4	24
39	Wetting Stability of Supported Graphene in Ambient Environment. Advanced Engineering Materials, 0, , 2101283.	1.6	0