Yongkyung Kwon

List of Publications by Year in Descending Order

60 papers	2,169 citations	24 h-index	46 g-index
62 ext. papers	2,323 ext. citations	3.4 avg, IF	4.77 L-index

#	Paper	IF	Citations
60	Metastable Metallic Phase of a Bilayer Blue Phosphorene Induced by Interlayer Bonding and Intralayer Charge Redistributions. *Journal of Physical Chemistry Letters*, **2021**, 12, 10981-10986	6.4	0
59	Adsorption of a single Pt atom on graphene: spin crossing between physisorbed triplet and chemisorbed singlet states. *Physical Chemistry Chemical Physics*, **2021**, 23, 22147-22154	3.6	1
58	Large Temperature-Independent Magnetoresistance without Gating Operation in Monolayer Graphene. *ACS Applied Materials & Interfaces*, **2020**, 12, 53134-53140	9.5	1
57	Energetic Stability of Free-standing and Metal-Supported Borophenes: Quantum Monte Carlo and Density Functional Theory Calculations. *Journal of Physical Chemistry C*, **2020**, 124, 24420-24428	3.8	2
56	Competition between H□ckel's Rule and Jahn-Teller Distortion in Small Carbon Rings: A Quantum Monte Carlo Study. *Journal of Physical Chemistry A*, **2020**, 124, 3636-3640	2.8	7
55	Role of remote interfacial phonons in the resistivity of graphene. *Applied Physics Letters*, **2019**, 115, 043104	3.4	6
54	4He adsorption on a single C40 molecule: Path integral Monte Carlo study. *Journal of the Korean Physical Society*, **2018**, 72, 95-100	0.6	
53	Phase stability and interlayer interaction of blue phosphorene. *Physical Review B*, **2018**, 98,	3.3	15
52	Control of CO Capture Process on Transition-Metal-Porphyrin-like Graphene with Mechanical Strain. *ACS Omega*, **2018**, 3, 10554-10563	3.9	6
51	Nature of Interlayer Binding and Stacking of sp-sp Hybridized Carbon Layers: A Quantum Monte Carlo Study. *Journal of Chemical Theory and Computation*, **2017**, 13, 5639-5646	6.4	19
50	Prediction of stable C7/12 and metastable C4/7 commensurate solid phases for He4 on graphite. *Physical Review B*, **2016**, 93,	3.3	10
49	High-throughput screening of metal-porphyrin-like graphenes for selective capture of carbon dioxide. *Scientific Reports*, **2016**, 6, 21788	4.9	13
48	Path integral Monte Carlo simulation of global and local superfluidity in liquid He4 reservoirs separated by nanoscale apertures. *Physical Review B*, **2016**, 94,	3.3	3
47	Anisotropic superfluidity of (4)He on a C36 fullerene molecule. *Journal of Chemical Physics*, **2015**, 143, 104311	3.9	4
46	Van der Waals correlation between two 4He monolayers on the opposite sides of graphene. *Journal of the Korean Physical Society*, **2015**, 66, 1856-1861	0.6	
45	Tailoring the Electronic Band Gap of Graphyne. *Journal of Physical Chemistry C*, **2014**, 118, 2463-2468	3.8	27
44	Widely tunable band gaps of graphdiyne: an ab initio study. *Physical Chemistry Chemical Physics*, **2014**, 16, 8935-9	3.6	41

43	Gas□olid Transition of Quantum Particles Interacting with Inverse-Power-Law Repulsive Potential. *Journal of the Physical Society of Japan*, **2014**, 83, 043602	1.5	
42	Commensurate-incommensurate solid transition in the He4 monolayer on □graphyne. *Physical Review B*, **2014**, 90,	3.3	6
41	4He adsorption on a H(2)-plated C20 molecular surface: the formation of helium buckyballs. *Physical Review E*, **2014**, 89, 042118	2.4	5
40	DFT and TB study of the geometry of hydrogen adsorbed on graphynes. *Journal of Physics Condensed Matter*, **2014**, 26, 385301	1.8	2
39	Cohesion energetics of carbon allotropes: quantum Monte Carlo study. *Journal of Chemical Physics*, **2014**, 140, 114702	3.9	125
38	Structural and Superfluid Properties of the 4He Monolayer on a C28 Molecule. *Journal of Low Temperature Physics*, **2013**, 171, 599-605	1.3	6
37	Semiclassical approximation solved by Monte Carlo integration as an efficient impurity solver for dynamical mean field theory and its cluster extensions. *Physical Review B*, **2013**, 88,	3.3	3
36	Multilayer Graphynes for Lithium Ion Battery Anode. *Journal of Physical Chemistry C*, **2013**, 117, 6919-6923	3.8	153
35	Exotic Geometrical and Electronic Properties in Hydrogenated Graphyne. *Journal of Physical Chemistry C*, **2013**, 117, 11960-11967	3.8	36
34	Mott-insulator to commensurate-solid transition in a 4He layer on □graphyne. *Physical Review B*, **2013**, 88,	3.3	8
33	Graphdiyne as a high-capacity lithium ion battery anode material. *Applied Physics Letters*, **2013**, 103, 263904	3.4	80
32	Thermodynamically Stable Calcium-Decorated Graphyne as a Hydrogen Storage Medium. *Journal of Physical Chemistry C*, **2012**, 116, 20220-20224	3.8	127
31	4He adsorption on a single graphene sheet: Path-integral Monte Carlo study. *Physical Review B*, **2012**, 85,	3.3	36
30	Interlayer exchange coupling and local superfluidity in (4He) N around C20. *Journal of the Korean Physical Society*, **2012**, 60, 14-18	0.6	5
29	Path-integral Monte Carlo study of asymmetric quantum quadrupolar rotors with fourth-order propagators. *Journal of the Korean Physical Society*, **2012**, 61, 513-517	0.6	
28	Commensurate-incommensurate transition of 4He adsorbed on a single C60 molecule. *Journal of Chemical Physics*, **2012**, 136, 064514	3.9	28
27	Superfluidity and structural order in H4e adsorbed on a C20 molecule: Path-integral Monte Carlo calculations. *Physical Review B*, **2010**, 82,	3.3	19
26	Superfluidity in Hydrogen-Deuterium Mixed Clusters. *Journal of Low Temperature Physics*, **2010**, 158, 281-287	1.3	5

25	Reentrant Behavior in Orientational Ordering of Asymmetric Quadrupolar Quantum Rotors. *Journal of the Korean Physical Society*, **2009**, 54, 1582-1588	0.6	4
24	Orientational Ordering of Electric Quadrupoles in FCC Lattices. *Journal of Low Temperature Physics*, **2008**, 150, 311-316	1.3	
23	Magic Number Stabilities of Small para-H2 Clusters Doped by a Single ortho-D2. *Journal of Low Temperature Physics*, **2008**, 150, 358-363	1.3	5
22	Superfluidity in D2(H2)N Clusters. *Journal of the Korean Physical Society*, **2008**, 52, 259-263	0.6	3
21	Local superfluidity in inhomogeneous quantum fluids. *Physical Review B*, **2006**, 74,	3.3	44
20	Anisotropic and inhomogeneous superfluidity in OCS-doped helium clusters. *Journal of Physics and Chemistry of Solids*, **2005**, 66, 1516-1519	3.9	7
19	Local Superfluidity in 4He and para-H2 Clusters. *Journal of Low Temperature Physics*, **2005**, 138, 253-258	1.3	7
18	Onset of superfluidity in small CO2(4He)N clusters. *Physical Review Letters*, **2005**, 94, 153401	7.4	67
17	OCS in para-hydrogen clusters: rotational dynamics and superfluidity. *Journal of Chemical Physics*, **2005**, 122, 181106	3.9	53
16	Path integral methods for rotating molecules in superfluids. *Journal of Chemical Physics*, **2005**, 123, 114301	3.9	66
15	Roton-rotation coupling of acetylene in 4He. *Physical Review Letters*, **2004**, 93, 250401	7.4	47
14	Nanoscale Quantum Solvation of para-H2 Around the Linear OCS Molecule Inside 4He Droplets. *Journal of Low Temperature Physics*, **2004**, 134, 269-274	1.3	11
13	Microscopic two-fluid theory of rotational constants of the OCS–H2 complex in 4He droplets. *Journal of Chemical Physics*, **2003**, 119, 1986-1995	3.9	14
12	Nanoscale molecular superfluidity of hydrogen. *Physical Review Letters*, **2002**, 89, 273401	7.4	96
11	THE FINITE-TEMPERATURE PATH INTEGRAL MONTE CARLO METHOD AND ITS APPLICATION TO SUPERFLUID HELIUM CLUSTERS. *Series on Advances in Quantum Many-body Theory*, **2002**, 91-128		6
10	Superfluid solvation structure of OCS in helium clusters. *Journal of Chemical Physics*, **2001**, 115, 10146	3.9	45
9	Localization of helium at an aromatic molecule in superfluid helium clusters. *Journal of Chemical Physics*, **2001**, 114, 3163-3169	3.9	50
8	Quantum solvation and molecular rotations in superfluid helium clusters. *Journal of Chemical Physics*, **2000**, 113, 6469-6501	3.9	215

7	Atomic-Scale Quantum Solvation Structure in Superfluid Helium-4 Clusters. *Physical Review Letters*, **1999**, 83, 4108-4111	7.4	107
6	Effects of backflow correlation in the three-dimensional electron gas: Quantum Monte Carlo study. *Physical Review B*, **1998**, 58, 6800-6806	3.3	166
5	Path integral Monte Carlo study of SF6-doped helium clusters. *Journal of Chemical Physics*, **1996**, 104, 2341-2348	3.9	84
4	Transient-estimate Monte Carlo in the two-dimensional electron gas. *Physical Review B*, **1996**, 53, 7376-7382	3.3	31
3	Quasiparticle bands in a two-dimensional crystal found by GW and quantum Monte Carlo calculations. *Physical Review B*, **1995**, 51, 13538-13546	3.3	10
2	Quantum Monte Carlo calculation of the Fermi-liquid parameters in the two-dimensional electron gas. *Physical Review B*, **1994**, 50, 1684-1694	3.3	107
1	Effects of three-body and backflow correlations in the two-dimensional electron gas. *Physical Review B*, **1993**, 48, 12037-12046	3.3	125