# Hiroshi Watanabe

List of Publications by Year
in descending order



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|---|---|---|---|
| 48 papers | 833 citations | 567281 15 h-index | 501196 28 g-index |
| 49 all docs | 49 docs citations | 49 times ranked | 921 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Effects of vapor-liquid phase transitions on sound-wave propagation: A molecular dynamics study. Physical Review Fluids, 2022, 7, . | 2.5 | 1 |
| 2 | Effects of polymers on the cavitating flow around a cylinder: A large-scale molecular dynamics analysis. Journal of Chemical Physics, 2021, 155, 014905. | 3.0 | 3 |
| 3 | Molecular dynamics simulation of soundwave propagation in a simple fluid. Journal of Chemical Physics, 2020, 153, 124504. | 3.0 | 4 |
| 4 | Effects of cavitation on KÃ¡rmÃ¡n vortex behind circular-cylinder arrays: A molecular dynamics study. Journal of Chemical Physics, 2020, 152, 034501. | 3.0 | 9 |
| 5 | Finite-Size Effects on KÃ¡rmÃ¡n Vortex in Molecular Dynamics Simulation. Journal of the Physical Society of Japan, 2019, 88, 075003. | 1.6 | 5 |
| 6 | Fast Algorithm for Generating Random Bit Strings and Multispin Coding for Directed Percolation. Journal of the Physical Society of Japan, 2019, 88, 024004. | 1.6 | 1 |
| 7 | SIMD vectorization for the Lennard-Jones potential with AVX2 and AVX-512 instructions. Computer Physics Communications, 2019, 237, 1-7. | 7.5 | 9 |
| 8 | Macroscopic Magnetization Control by Symmetry Breaking of Photoinduced Spin Reorientation with Intense Terahertz Magnetic Near Field. Physical Review Letters, 2018, 120, 107202. | 7.8 | 53 |
| 9 | Polymer effects on KÃ¡rmÃ¡n vortex: Molecular dynamics study. Journal of Chemical Physics, 2018, 148, 144901. | 3.0 | 11 |
| 10 | Stability of velocity-Verlet- and Liouville-operator-derived algorithms to integrate non-Hamiltonian systems. Journal of Chemical Physics, 2018, 149, 154101. | 3.0 | 7 |
| 11 | Failure of Deterministic and Stochastic Thermostats to Control Temperature of Molecular Systems. Journal of the Physical Society of Japan, 2017, 86, 075004. | 1.6 | 1 |
| 12 | Electron Transfer Pathways in a Multiheme Cytochrome MtrF. Seibutsu Butsuri, 2017, 57, 151-152. | 0.1 | 0 |
| 13 | Ripening kinetics of bubbles: A molecular dynamics study. Journal of Chemical Physics, 2016, 145, 124707. | 3.0 | 7 |
| 14 | Scaling relation for dangerously irrelevant symmetry-breaking fields. Physical Review B, 2015, 91, . | 3.2 | 18 |
| 15 | Dynamics of photoinduced change of magnetoanisotropy parameter in orthoferrites probed with terahertz excited coherent spin precession. Physical Review B, 2015, 92, . | 3.2 | 42 |
| 16 | Optically detecting the edge-state of a three-dimensional topological insulator under ambient conditions by ultrafast infrared photoluminescence spectroscopy. Scientific Reports, 2015, 5, 16443. | 3.3 | 4 |
| 17 | Layer number dependence of carrier lifetime in graphenes observed using time-resolved mid-infrared luminescence. Chemical Physics Letters, 2015, 637, 58-62. | 2.6 | 7 |
| 18 | Magnetization-free measurements of spin orientations in orthoferrites using terahertz time domain spectroscopy. Applied Physics Letters, 2015, 107, . | 3.3 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Ostwald ripening in multiple-bubble nuclei. Journal of Chemical Physics, 2014, 141, 234703. | 3.0 | 26 |
| 20 | Ultrafast dynamics of photoinduced semiconductor-to-metal transition in the optical switching nano-oxideTi3O5. Physical Review B, 2014, 90, . | 3.2 | 24 |
| 21 | Nonlinear photoluminescence properties of trions in hole-doped single-walled carbon nanotubes. Physical Review B, 2014, 89, . | 3.2 | 15 |
| 22 | Huge-scale molecular dynamics simulation of multibubble nuclei. Computer Physics Communications, 2013, 184, 2775-2784. | 7.5 | 19 |
| 23 | Phosphiteâ€driven Selfâ€sufficient Cytochrome P450. ChemCatChem, 2013, 5, 3835-3840. | 3.7 | 11 |
| 24 | Possibility of deconfined criticality in SU(<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 557 Td (xmlns:mml="http://www.w3.org/199 xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>. Physical Review B, 2013, 88, . | 3.2 | 86 |
| 25 | Usefulness of an equal-probability assumption for out-of-equilibrium states: A master equation approach. Physical Review E, 2012, 86, 041133. | 2.1 | 1 |
| 26 | Phase diagram and universality of the Lennard-Jones gas-liquid system. Journal of Chemical Physics, 2012, 136, 204102. | 3.0 | 105 |
| 27 | Molecular Dynamics Study of Rotating Nanodroplets: Finite-size Effects and Nonequilibrium Deformation. Journal of Physics: Conference Series, 2011, 297, 012023. | 0.4 | 1 |
| 28 | Static and dynamical aspects of the metastable states of first order transition systems. Physics Procedia, 2011, 15, 76-80. | 1.2 | 4 |
| 29 | Evaporation-condensation transition of the two-dimensional Potts model in the microcanonical ensemble. Physical Review E, 2011, 84, 061107. | 2.1 | 15 |
| 30 | Efficient Implementations of Molecular Dynamics Simulations for Lennard-Jones Systems. Progress of Theoretical Physics, 2011, 126, 203-235. | 2.0 | 15 |
| 31 | Efficiencies of dynamic Monte Carlo algorithms for off-lattice particle systems with a single impurity. Physics Procedia, 2010, 3, 1481-1485. | 1.2 | 0 |
| 32 | Cumulative distribution functions associated with bubble-nucleation processes in cavitation. Physical Review E, 2010, 82, 051604. | 2.1 | 27 |
| 33 | Dynamical study of a polydisperse hard-sphere system. Physical Review E, 2010, 82, 021201. | 2.1 | 10 |
| 34 | Efficiency of rejection-free methods for dynamic Monte Carlo studies of off-lattice interacting particles. Physical Review E, 2009, 79, 026706. | 2.1 | 4 |
| 35 | Non-Equilibrium Relaxation Analysis on Two-Dimensional Melting. Progress of Theoretical Physics Supplement, 2009, 178, 41-48. | 0.1 | 0 |
| 36 | Mapping functions and critical behavior of percolation on rectangular domains. Physical Review E, 2008, 78, 041131. | 2.1 | 5 |

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|---|---|---|---|
| 37 | Markovian Approximation for the NosÃ©â€“Hoover Method and H-Theorem. Journal of the Physical Society of Japan, 2008, 77, 103001. | 1.6 | 1 |
| 38 | Ergodicity of a thermostat family of the NosÃ©-Hoover type. Physical Review E, 2007, 75, 040102. | 2.1 | 18 |
| 39 | Massively parallel quantum computer simulator. Computer Physics Communications, 2007, 176, 121-136. | 7.5 | 138 |
| 40 | Efficiency of rejection-free dynamic Monte Carlo methods for homogeneous spin models, hard disk systems, and hard sphere systems. Physical Review E, 2006, 74, 026707. | 2.1 | 4 |
| 41 | Positional order and diffusion processes in particle systems. Physical Review E, 2006, 74, 030201. | 2.1 | 1 |
| 42 | Watanabe and Hu Reply:. Physical Review Letters, 2005, 95, . | 7.8 | 8 |
| 43 | Size-dispersity effects in two-dimensional melting. Physical Review E, 2005, 71, 016702. | 2.1 | 11 |
| 44 | Superscaling of Percolation on Rectangular Domains. Physical Review Letters, 2004, 93, 190601. | 7.8 | 19 |
| 45 | Critical exponents of isotropic-hexatic phase transition in the hard-disk system. Physical Review E, 2004, 69, 045103. | 2.1 | 19 |
| 46 | Nonequilibrium relaxation analysis of two-dimensional melting. Physical Review E, 2002, 66, 041110. | 2.1 | 20 |
| 47 | Polydispersity Effect and Universality of Finite-Size Scaling Function. Journal of the Physical Society of Japan, 2001, 70, 1537-1542. | 1.6 | 10 |
| 48 | Escape probability of a random walker on a lattice doped with absorbers. Journal of Chemical Physics, 1978, 69, 4872-4875. | 3.0 | 7 |