Masahide Sato

List of Publications by Year
in descending order

75 papers	717 citations	567281 15 h-index	610901 24 g-index
75 all docs	75 docs citations	75 times ranked	205 citing authors

#	Article	IF	Citations
1	Effect of impurities on tiling in a two-dimensional dodecagonal quasicrystal. Japanese Journal of Applied Physics, 2022, 61, 045504.	1.5	0
2	Step-bunching instability of growing interfaces between ice and supercooled water. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2115955119.	7.1	7
3	Effect of the Interaction Length on Clusters Formed by Spherical One-Patch Particles on Flat Planes. Langmuir, 2021, 37, 4213-4221.	3.5	4
4	Clusters formed by dumbbell-like one-patch particles confined in thin systems. Scientific Reports, 2021, 11, 18078.	3.3	2
5	Effect of Patch Area and Interaction Length on Clusters and Structures Formed by One-Patch Particles in Thin Systems. ACS Omega, 2020, 5, 28812-28822.	3.5	6
6	Self-Assembly Formed by Spherical Patchy Particles with Long-Range Attraction. Journal of the Physical Society of Japan, 2019, 88, 104801.	1.6	6
7	Effect of density change at crystallization on a one-dimensional heat balance equation at solidâ€“liquid interface. Japanese Journal of Applied Physics, 2019, 58, 045506.	1.5	4
8	Effect of the Surface Diffusion and Evaporation of Impurities on Step Bunching Induced by Impurities. Journal of the Physical Society of Japan, 2019, 88, 114801.	1.6	1
9	Two-dimensional structures formed in a binary system of DNA nanoparticles with a short-range interaction potential. Japanese Journal of Applied Physics, 2018, 57, 125002.	1.5	1
10	Self-Assembly of Two-Dimensional Patchy Colloidal Dumbbells. Journal of the Physical Society of Japan, 2018, 87, 064601.	1.6	2
11	Effect of evaporation on step bunching induced by impurities. Physical Review E, 2018, 97, 062801.	2.1	2
12	Two mechanisms forming a comblike step pattern induced by a moving linear adatom source. Physical Review E, 2017, 95, 032803.	2.1	0
13	Step Bunching Induced by Immobile Impurities in a Surface Diffusion Field. Journal of the Physical Society of Japan, 2017, 86, 114603.	1.6	2
14	Three-Dimensional Lattice Structure Formed in a Binary System with DNA Nanoparticles. Journal of the Physical Society of Japan, 2017, 86, 064601.	1.6	1
15	Effect of difference in interaction strength on two-dimensional lattice structure in a binary system with DNA nanoparticles. Japanese Journal of Applied Physics, 2017, 56, 075001.	1.5	0
16	Effect of direction of an external force on crystallization of colloidal particles in a V-shaped groove by sedimentation. Japanese Journal of Applied Physics, 2016, 55, 095601.	1.5	1
17	Two-Dimensional Crystal Structure Formed by Two Components of DNA Nanoparticles on a Substrate. Journal of the Physical Society of Japan, 2016, 85, 074605.	1.6	5
18	Dependence of the Apex Angle of an Inverted Pyramidal-Shaped Container on Crystallization of Brownian Particles. Journal of the Physical Society of Japan, 2015, 84, 114601.	1.6	2

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19	Dependence of crystallization of Brownian particles by sedimentation on the force direction. Japanese Journal of Applied Physics, 2015, 54, 115503.	1.5	1
20	Removal of defects in a colloidal crystal grown in an inverted pyramidal container by changing the external force. Japanese Journal of Applied Physics, 2015, 54, 110301.	1.5	1
21	Relation between the Step Pattern and the Velocity of the Moving Linear Adatom Source. E-Journal of Surface Science and Nanotechnology, 2015, 13, 269-274.	0.4	1
22	Crystallization of Brownian Particles in a Pyramidal Pit by a Uniform External Force. Journal of the Physical Society of Japan, 2015, 84, 044601.	1.6	4
23	Period of a comblike pattern controlled by atom supply and noise. Physical Review E, 2015, 91, 012409.	2.1	2
24	Effect of container shape and walls on solidification of Brownian particles in a narrow system. Physical Review E, 2014, 89, 042401.	2.1	8
25	Crystallization of Brownian particles in thin systems constrained by walls. Physical Review E, 2014, 90, 032404.	2.1	5
26	Gravitational Tempering in Colloidal Epitaxy To Reduce Defects Further. Crystal Growth and Design, 2014, 14, 2083-2086.	3.0	5
27	Cluster diffusion on two-dimensional surface with immobile impurities. Journal of Crystal Growth, 2014, 401, 504-507.	1.5	1
28	Ordering of Brownian particles from walls due to an external force. Journal of Crystal Growth, 2014, 401, 87-92.	1.5	7
29	Colloidal crystallization on tilted substrates under gravitational fields. Journal of Crystal Growth, 2014, 401, 905-909.	1.5	5
30	Formation of a crystal of Brownian particles under a uniform external force. Physical Review E, 2013, 87, .	2.1	13
31	Change in the branch period of the step pattern formed by a moving linear sourceâ€”initial coarsening and effect of an abrupt change in the velocity. Journal of Crystal Growth, 2013, 362, 6-12.	1.5	3
32	Crystallization of Brownian Particles from Walls Induced by a Uniform External Force. Journal of the Physical Society of Japan, 2013, 82, 084804.	1.6	8
33	Group chase and escape with some fast chasers. Physical Review E, 2012, 86, 067102.	2.1	19
34	Chasing and escaping by three groups of species. Physical Review E, 2012, 85, 066102.	2.1	14
35	Formation of Step Bunches Induced by Flow in Solution. Journal of the Physical Society of Japan, 2012, 81, 064601.	1.6	2
36	Effect of Flow in Solution on Motion of Steps during Solution Growth. Journal of the Physical Society of Japan, 2011, 80, 074606.	1.6	3

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37	Two-Dimensional Motion of Unstable Steps Induced by Flow in Solution. Journal of the Physical Society of Japan, 2011, 80, 074604.	1.6	2
38	Step bunching induced by flow in solution. Journal of Crystal Growth, 2011, 318, 5-9.	1.5	3
39	Formation of finger-like step patterns on a Si(111) vicinal face. Journal of Crystal Growth, 2011, 318, 14-17.	1.5	6
40	Growth Law of Bunch Size in Step Bunching Induced by Flow in Solution. Journal of the Physical Society of Japan, 2011, 80, 024604.	1.6	4
41	Effect of immobile impurities on two-dimensional nucleation. Physical Review E, 2011, 84, 021605.	2.1	3
42	Effect of immobile impurities on motion of steps on a vicinal face. Physical Review E, 2011, 84, 061604.	2.1	4
43	Pattern formation of a step induced by a moving linear source. Physical Review B, 2011, 84, .	3.2	6
44	Step Instabilities on a Vicinal Face Induced by Flow in Solution. Journal of the Physical Society of Japan, 2010, 79, 064606.	1.6	6
45	Step Instabilities on Si(111) Vicinal Face near 1Ã—1 â†”7 Ã—7 Transition Temperature during Sublimation. Journal of the Physical Society of Japan, 2009, 78, 124602.	1.6	0
46	Effect of impingement and evaporation on drift-induced step instabilities on Si(111) vicinal face near transition temperature. Journal of Crystal Growth, 2008, 310, 1376-1379.	1.5	0
47	Effect of alternation of kinetic coefficients on step instabilities on Si(001) vicinal face. Journal of Crystal Growth, 2008, 310, 1371-1375.	1.5	2
48	Step wandering on Si(111) vicinal face near the1Ã—1â†”7Ã—7transition temperature with drift of adatoms parallel to steps. Physical Review E, 2008, 77, 062601.	2.1	1
49	Drift-Induced Step Instabilities on Si(111) Vicinal Face near 1Ã—1â†”7Ã—7 Transition Temperature. Journal of the Physical Society of Japan, 2007, 76, 064602.	1.6	2
50	Motion of step pairs during drift-induced step bunching on a Si(001) vicinal face. Journal of Crystal Growth, 2007, 303, 85-89.	1.5	3
51	Effect of step permeability on step instabilities due to alternation of kinetic coefficients on a growing vicinal face. European Physical Journal B, 2007, 59, 311-318.	1.5	8
52	Effect of Two-Dimensionality on Step Bunching on a Si(001) Vicinal Face. Journal of the Physical Society of Japan, 2006, 75, 043601.	1.6	4
53	Drift-induced step instabilities due to the gap in the diffusion coefficient. Journal of Crystal Growth, 2005, 275, e129-e134.	1.5	4
54	Evaporation and impingement effects on drift-induced step instabilities on a Si(001) vicinal face. Physical Review B, 2005, 72, .	3.2	8

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55	Growth of Step Bunches on a Si(001) Vicinal Face with Drift of Adatoms. Journal of the Physical Society of Japan, 2004, 73, 1827-1832.	1.6	10
56	Repulsion-mediated step wandering on a Si(001) vicinal face. Physical Review B, 2003, 67, .	3.2	26
57	Step Bunching with Alternation of Structural Parameters. Journal of the Physical Society of Japan, 2003, 72, 2850-2855.	1.6	7
58	Step wandering induced by the drift of adatoms in a conserved system. Physical Review B, 2002, 65, .	3.2	19
59	Step bunching induced by drift of adatoms with anisotropic surface diffusion. Journal of Crystal Growth, 2002, 237-239, 43-46.	1.5	15
60	Growth of permeable step bunches formed by drift of adatoms. Surface Science, 2001, 493, 480-484.	1.9	2
61	Growth law of step bunches induced by the Ehrlichâ€“Schwoebel effect in growth. Surface Science, 2001, 493, 494-498.	1.9	33
62	INSTABILITIES OF PERMEABLE STEPS INDUCED BY THE DRIFT OF ADATOMS. Surface Review and Letters, 2000, 07, 607-611.	1.1	1
63	Instabilities of steps induced by the drift of adatoms and effect of the step permeability. Physical Review B, 2000, 62, 8452-8472.	3.2	73
64	Pattern formation in the instability of a vicinal surface by the drift of adatoms. Physical Review E, 1999, 60, 7120-7125.	2.1	15
65	Change of wandering pattern with anisotropy in step kinetics. Journal of Crystal Growth, 1999, 198-199, 38-42.	1.5	7
66	Growth of step bunches formed by the drift of adatoms. Surface Science, 1999, 442, 318-328.	1.9	47
67	Step Bunching Induced by the Drift of Adatoms.. Hyomen Kagaku, 1999, 20, 824-829.	0.0	1
68	Control of Chaotic Wandering of an Isolated Step by the Drift of Adatoms. Physical Review Letters, 1998, 80, 4233-4236.	7.8	35
69	Wandering and Bunching Instabilities of Steps Described By Nonlinear Evolution Equations. Surface Review and Letters, 1998, 05, 841-849.	1.1	25
70	Hierarchical Bunching of Steps in a Conserved System. Journal of the Physical Society of Japan, 1998, 67, 3675-3678.	1.6	23
71	Kinematical Bound States of Steps Caused by Asymmetry in Step Kinetics. Journal of the Physical Society of Japan, 1997, 66, 1054-1062.	1.6	10
72	Nonlinear Effect in Step Bunching Caused by Electric Current. Journal of the Physical Society of Japan, 1996, 65, 1515-1518.	1.6	25

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73	Wandering Instability of an Isolated Step with Direct Electric Current. Journal of the Physical Society of Japan, 1996, 65, 2146-2151.	1.6	27
74	Fluctuations and instabilities of steps in the growth and sublimation of crystals. Journal of Crystal Growth, 1995, 146, 164-170.	1.5	36
75	Morphological instability caused by asymmetry in step kinetics. Physical Review B, 1995, 51, 11172-11175.	3.2	66