

Simon A Brown

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100
papers

1,818
citations

25
h-index

36
g-index

115
ext. papers

2,101
ext. citations

4.2
avg, IF

4.69
L-index

#	Paper	IF	Citations
100	Antimony oxide nanostructures in the monolayer limit: self-assembly of van der Waals-bonded molecular building blocks. <i>Nanotechnology</i> , 2021 , 32, 125701	3.4	0
99	Nanowire networks: how does small-world character evolve with dimensionality?. <i>Nanoscale Horizons</i> , 2021 , 6, 482-488	10.8	2
98	Removable capping layer for air-sensitive GdN. <i>Nanotechnology</i> , 2020 , 31, 275709	3.4	
97	Realization of Symmetry-Enforced Two-Dimensional Dirac Fermions in Nonsymmorphic Γ -Bismuthene. <i>ACS Nano</i> , 2020 , 14, 1888-1894	16.7	18
96	Long-range temporal correlations in scale-free neuromorphic networks. <i>Network Neuroscience</i> , 2020 , 4, 432-447	5.6	11
95	Atomic Scale Dynamics Drive Brain-like Avalanches in Percolating Nanostructured Networks. <i>Nano Letters</i> , 2020 , 20, 3935-3942	11.5	17
94	Moiré patterns: a simple analytical model. <i>2D Materials</i> , 2020 , 7, 011005	5.9	11
93	Synaptic and neuromorphic functions: general discussion. <i>Faraday Discussions</i> , 2019 , 213, 553-578	3.6	1
92	Avalanches and criticality in self-organized nanoscale networks. <i>Science Advances</i> , 2019 , 5, eaaw8438	14.3	28
91	Moiré patterns in van der Waals heterostructures. <i>Physical Review B</i> , 2019 , 99,	3.3	12
90	Synaptic dynamics in complex self-assembled nanoparticle networks. <i>Faraday Discussions</i> , 2019 , 213, 471-485	3.6	17
89	Survey of electronic structure of Bi and Sb thin films by first-principles calculations and photoemission measurements. <i>Journal of Physics and Chemistry of Solids</i> , 2019 , 128, 109-117	3.9	6
88	Engineering multiple topological phases in nanoscale Van der Waals heterostructures: realisation of Γ -antimonene. <i>2D Materials</i> , 2018 , 5, 011002	5.9	26
87	The nanocoherer: an electrically and mechanically resettable resistive switching device based on gold clusters assembled on paper. <i>Nano Futures</i> , 2018 , 2, 011002	3.6	7
86	Quantum fluctuations in percolating superconductors: an evolution with effective dimensionality. <i>Nanotechnology</i> , 2017 , 28, 165704	3.4	4
85	Topological phase stability and transformation of bismuthene. <i>Europhysics Letters</i> , 2017 , 119, 27002	1.6	15
84	Facile fabrication of complex networks of memristive devices. <i>Scientific Reports</i> , 2017 , 7, 7955	4.9	28

83	Topological phases in double layers of bismuthene and antimonene. <i>Nanotechnology</i> , 2017 , 28, 395706	3.4	16
82	Lattice dynamics in Sn nanoislands and cluster-assembled films. <i>Physical Review B</i> , 2017 , 95,	3.3	5
81	Single atomic layer allotrope of bismuth with rectangular symmetry. <i>Physical Review B</i> , 2017 , 96,	3.3	13
80	Percolating transport in superconducting nanoparticle films. <i>Journal of Applied Physics</i> , 2017 , 122, 223905	3.5	3
79	Stable Self-Assembled Atomic-Switch Networks for Neuromorphic Applications. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 5194-5201	2.9	18
78	Neuromorphic behavior in percolating nanoparticle films. <i>Physical Review E</i> , 2015 , 92, 052134	2.4	17
77	Origin of the moiré pattern in thin Bi films deposited on HOPG. <i>Physical Review B</i> , 2015 , 91,	3.3	12
76	Scanning Tunneling and Atomic Force Microscopy Evidence for Covalent and Noncovalent Interactions between Aryl Films and Highly Ordered Pyrolytic Graphite. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5820-5826	3.8	27
75	Covalently anchored carboxyphenyl monolayer via aryldiazonium ion grafting: a well-defined reactive tether layer for on-surface chemistry. <i>Langmuir</i> , 2014 , 30, 7104-11	4	29
74	STM driven modification of bismuth nanostructures. <i>Surface Science</i> , 2014 , 621, 140-145	1.8	5
73	The superconducting proximity effect in epitaxial Al/Pb nanocomposites. <i>Superconductor Science and Technology</i> , 2014 , 27, 015008	3.1	1
72	First-principles and spectroscopic studies of Bi(110) films: Thickness-dependent Dirac modes and property oscillations. <i>Physical Review B</i> , 2014 , 90,	3.3	21
71	Continuum percolation with tunneling. <i>Physical Review B</i> , 2014 , 89,	3.3	16
70	Growth and electronic properties of NaCl on HOPG. <i>Surface Science</i> , 2014 , 620, 45-50	1.8	2
69	Quantized conductance and switching in percolating nanoparticle films. <i>Physical Review Letters</i> , 2013 , 111, 136808	7.4	26
68	Electronic size effects in three-dimensional nanostructures. <i>Nano Letters</i> , 2013 , 13, 43-7	11.5	36
67	Anisotropic oxidation of bismuth nanostructures: Evidence for a thin film allotrope of bismuth. <i>Applied Physics Letters</i> , 2012 , 100, 151904	3.4	21
66	Grain boundaries between bismuth nanocrystals. <i>Acta Materialia</i> , 2012 , 60, 674-681	8.4	7

65	Germanium nano-cluster films as humidity and hydrogen sensors. <i>Journal of Applied Physics</i> , 2012 , 112, 074514	2.5	11
64	Ag-Au nanoclusters: Structure and phase segregation. <i>Applied Physics Letters</i> , 2011 , 99, 171914	3.4	30
63	Power law fitting procedures: The electrical conductance of coalescing nanocluster films. <i>Journal of Applied Physics</i> , 2011 , 109, 014910	2.5	
62	The morphology of tin cluster assembled films and the effect of nitrogen. <i>European Physical Journal D</i> , 2011 , 61, 81-85	1.3	5
61	Fractal electronic devices: simulation and implementation. <i>Nanotechnology</i> , 2011 , 22, 365304	3.4	21
60	STM and XPS investigations of bismuth islands on HOPG. <i>Surface Science</i> , 2011 , 605, 659-667	1.8	45
59	Gas Dynamic Considerations for Performance of Nanocluster Deposition System 2011 ,		3
58	Electrical signature of nanoscale coalescence in a percolating Bi nanocluster film. <i>Physical Review B</i> , 2010 , 82,	3.3	3
57	Synchrotron x-ray diffraction measurements of strain in metallic nanoparticles with oxide shells. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 075301	3	9
56	Coefficient of restitution for bouncing nanoparticles. <i>Physical Review B</i> , 2010 , 81,	3.3	22
55	Oblique Impacts and Rebounds of Lennard-Jones Clusters on Solid Surfaces. <i>Mathematics and Mechanics of Solids</i> , 2010 , 15, 771-781	2.3	7
54	The effects of annealing and growth temperature on the morphologies of Bi nanostructures on HOPG. <i>Surface Science</i> , 2010 , 604, 1273-1282	1.8	22
53	Evolution of neck radius and relaxation of coalescing nanoparticles. <i>Physical Review B</i> , 2009 , 80,	3.3	25
52	The size dependence of tin oxide atomic cluster nanowire field effect transistors. <i>Nanotechnology</i> , 2009 , 20, 425201	3.4	11
51	Characterization of a template process for conducting cluster-assembled wires. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 97, 315-321	2.6	2
50	The fabrication and optical characterisation of SnO ₂ cluster films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 931-934	1.6	1
49	The new deficit model. <i>Nature Nanotechnology</i> , 2009 , 4, 609-11	28.7	52
48	Real-time TEM and kinetic Monte Carlo studies of the coalescence of decahedral gold nanoparticles. <i>ACS Nano</i> , 2009 , 3, 3809-13	16.7	94

47	Tin oxide nanocluster hydrogen and ammonia sensors. <i>Nanotechnology</i> , 2008 , 19, 015502	3.4	31
46	Electrical characterization of gold island films: A route to control of nanoparticle deposition. <i>Applied Physics Letters</i> , 2008 , 93, 203111	3.4	10
45	Particle size effect of hydrogen-induced lattice expansion of palladium nanoclusters. <i>Physical Review B</i> , 2008 , 78,	3.3	68
44	Anisotropic corner crossing barriers in nanorod growth. <i>Journal of Physics: Conference Series</i> , 2008 , 100, 072007	0.3	7
43	Oxidation of bismuth cluster films. <i>Current Applied Physics</i> , 2008 , 8, 287-290	2.6	2
42	Structure of palladium nanoclusters for hydrogen gas sensors. <i>Current Applied Physics</i> , 2008 , 8, 443-446	2.6	7
41	Experimental and simulational study of the operation conditions for a high transmission mass filter. <i>Review of Scientific Instruments</i> , 2007 , 78, 053906	1.7	13
40	Structure of oxidized bismuth nanoclusters. <i>Acta Crystallographica Section B: Structural Science</i> , 2007 , 63, 569-76		11
39	Molecular dynamics simulations of reflection and adhesion behavior in Lennard-Jones cluster deposition. <i>Physical Review B</i> , 2007 , 76,	3.3	25
38	Hydrogen sensors based on percolation and tunneling in films of palladium clusters 2007 ,		2
37	Structure of palladium nanoclusters for hydrogen gas sensors. <i>Materials at High Temperatures</i> , 2007 , 24, 211-216	1.1	1
36	Bi cluster-assembled interconnects produced using SU8 templates. <i>Nanotechnology</i> , 2007 , 18, 155607	3.4	
35	Selective Filling and Sintering of Copper Nanoclusters for Interconnect. <i>IEEE Nanotechnology Magazine</i> , 2007 , 6, 556-560	2.6	1
34	A hydrogen sensor based on tunneling between palladium clusters. <i>Applied Physics Letters</i> , 2007 , 91, 181910	3.4	83
33	Electrically conducting Bi cluster-assembled wires formed using SiN nanostencils. <i>Microelectronic Engineering</i> , 2006 , 83, 1460-1463	2.5	1
32	Bi on graphite: Morphology and growth characteristics of star-shaped dendrites. <i>Physical Review B</i> , 2006 , 73,	3.3	25
31	Reentrant adhesion behavior in nanocluster deposition. <i>Physical Review Letters</i> , 2006 , 97, 186103	7.4	25
30	From the adhesion of atomic clusters to the fabrication of nanodevices. <i>Applied Physics Letters</i> , 2006 , 89, 213105	3.4	25

29	Production and assembly of atomic clusters. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1217-1222	1.6	3
28	Electron microscopy of bismuth building blocks for self-assembled nanowires. <i>Current Applied Physics</i> , 2006 , 6, 453-456	2.6	3
27	Growth of nanorods and mesoscale stars prior to an orientation transition in thin Bi films on graphite. <i>Applied Surface Science</i> , 2006 , 252, 5563-5567	6.7	8
26	Morphological differences between Bi, Ag and Sb nano-particles and how they affect the percolation of current through nano-particle networks. <i>European Physical Journal D</i> , 2006 , 39, 415-422	1.3	17
25	Three-dimensional growth characteristics of antimony aggregates on graphite. <i>European Physical Journal D</i> , 2006 , 39, 433-438	1.3	13
24	Construction and Application of a UHV Compatible Cluster Deposition System. <i>Journal of Nanoparticle Research</i> , 2006 , 8, 405-416	2.3	32
23	A crystallographic orientation transition and early stage growth characteristics of thin Bi films on HOPG. <i>Surface Science</i> , 2005 , 587, 175-184	1.8	57
22	Structure of unsupported antimony nanoclusters. <i>European Physical Journal D</i> , 2005 , 34, 29-34	1.3	4
21	Growth of oriented Bi nanorods at graphite step-edges. <i>Physical Review B</i> , 2005 , 72,	3.3	22
20	Templated-assembly of conducting antimony cluster wires. <i>Nanotechnology</i> , 2004 , 15, 1382-1387	3.4	28
19	Electrical measurements of nanoscale bismuth cluster films. <i>European Physical Journal D</i> , 2003 , 24, 291-294	1.3	10
18	Coalescence of nanoscale metal clusters: Molecular-dynamics study. <i>Physical Review B</i> , 2003 , 68,	3.3	59
17	Finite-size effects in the conductivity of cluster assembled nanostructures. <i>Physical Review Letters</i> , 2002 , 88, 226802	7.4	69
16	Conductivity, photoconductivity and optical properties of amorphous GaN films. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 693, 81		1
15	Argon plasma etching of gallium nitride: spectroscopic surprises. <i>Nanotechnology</i> , 2000 , 11, 263-269	3.4	4
14	Effects of dry processing on the optical properties of GaN. <i>Journal of Applied Physics</i> , 2000 , 88, 7110-7114	4.5	19
13	High resolution reactive ion etching of GaN and etch-induced effects. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999 , 17, 2759		20
12	Reactive ion etch-induced effects on the near-band-edge luminescence in GaN. <i>Applied Physics Letters</i> , 1999 , 74, 3185-3187	3.4	26

11	Reactive-ion-etched gallium nitride: Metastable defects and yellow luminescence. <i>Applied Physics Letters</i> , 1999 , 75, 3285-3287	3-4	34
10	Magnetic-field-induced bistability in resonant tunneling. <i>Physical Review B</i> , 1998 , 58, R1758-R1761	3-3	7
9	Inter-Landau-level transitions near the threshold of 2D-2D tunneling. <i>Physical Review B</i> , 1997 , 56, 1967-1972	3-3	6
8	Vortex Dynamics and Instabilities in Layered and Homogeneous Ta/Ge Superconductors. <i>Physical Review Letters</i> , 1997 , 78, 3378-3381	7-4	28
7	Fermi-edge singularities in photoluminescence from modulation-doped GaAs quantum wells. <i>Physical Review B</i> , 1997 , 56, 3937-3940	3-3	19
6	The use of wide ballistic cavities to investigate local weak localization processes induced by geometric scattering. <i>Semiconductor Science and Technology</i> , 1996 , 11, 1189-1197	1-8	3
5	Resonant tunneling in double-quantum-well triple-barrier heterostructures. <i>Physical Review B</i> , 1996 , 54, 4857-4862	3-3	21
4	Evolution of the interband absorption threshold with the density of a two-dimensional electron gas. <i>Physical Review B</i> , 1996 , 54, R11082-R11085	3-3	33
3	A patterned gate architecture for the study of high-quality AlGaAs/GaAs systems in the extreme quantum limit. <i>Semiconductor Science and Technology</i> , 1994 , 9, 392-397	1-8	2
2	Magneto-optical probe of two-dimensional electron liquid and solid phases. <i>Physical Review B</i> , 1992 , 46, 7957-7960	3-3	82
1	A new design for a UHV compatible Czochralski crystal growth system. <i>Review of Scientific Instruments</i> , 1990 , 61, 2427-2429	1-7	6