Fabien Cheynis

List of Publications by Year in Descending Order

52 papers	914 citations	16 h-index	29 g-index
53 ext. papers	1,040 ext. citations	4.4 avg, IF	3.94 L-index

#	Paper	IF	Citations
52	Mechanism of droplet motion and in-plane nanowire formation with and without electromigration. *Applied Surface Science*, **2022**, 579, 152015	6.7	0
51	Kinetic Monte Carlo simulations of the diffusion and shape evolution of single-layer clusters on a hexagonal lattice with and without external force. *Applied Surface Science*, **2021**, 552, 149454	6.7	1
50	Electric forces on a confined advacancy island. *Physical Review B*, **2020**, 102,	3.3	2
49	2D Manipulation of Nanoobjects by Perpendicular Electric Fields: Implications for Nanofabrication. *ACS Applied Nano Materials*, **2020**, 3, 1118-1122	5.6	3
48	Dynamics of Au-Ge liquid droplets on Ge(1´1´1) terraces: Nucleation, growth and dynamic coalescence. *Applied Surface Science*, **2020**, 509, 144667	6.7	2
47	Kinetics and coupled dynamics of dewetting and chemical reaction in Si/(hbox {SiO}_2)/Si system. *Journal of Materials Science*, **2020**, 55, 16074-16082	4.3	
46	Atomic Transport in Au-Ge Droplets: Brownian and Electromigration Dynamics. *Physical Review Letters*, **2019**, 123, 176101	7.4	6
45	Shape changes of two-dimensional atomic islands and vacancy clusters diffusing on epitaxial (1 1 1) interfaces under the impact of an external force. *Journal of Crystal Growth*, **2019**, 520, 42-45	1.6	3
44	2D nanostructure motion on anisotropic surfaces controlled by electromigration. *Applied Surface Science*, **2019**, 469, 463-470	6.7	13
43	Interplay between deoxidation and dewetting for ultrathin SOI films. *Applied Physics Letters*, **2017**, 110, 161601	3.4	4
42	Surface-dependent scenarios for dissolution-driven motion of growing droplets. *Scientific Reports*, **2017**, 7, 902	4.9	13
41	Improvement of etching and cleaning methods for integration of raised source and drain in FD-SOI technologies. *Microelectronic Engineering*, **2017**, 180, 56-64	2.5	3
40	Spatial inhomogeneity and temporal dynamics of a 2D electron gas in interaction with a 2D adatom gas. *Scientific Reports*, **2017**, 7, 10642	4.9	0
39	Dewetting of patterned solid films: Towards a predictive modelling approach. *Applied Physics Letters*, **2017**, 110, 263105	3.4	10
38	Elastic cost of silicon step rebonding. *Physical Review B*, **2016**, 93,	3.3	1
37	Low thermal budget for Si and SiGe surface preparation for FD-SOI technology. *Applied Surface Science*, **2016**, 371, 436-446	6.7	9
36	Surface diffusion of Au on 3□ Si(111)□Au studied by nucleation-rate and Ostwald-ripening analysis. *Surface Science*, **2016**, 647, 8-11	1.8	10

35	Catalytically enhanced thermal decomposition of chemically grown silicon oxide layers on Si(001). *Applied Physics Letters*, **2016**, 108, 111601	3.4	8
34	How to control solid state dewetting: A short review. *Surface Science Reports*, **2016**, 71, 391-409	12.9	113
33	Improvement of Boron Doping in SiGe Raised Sources and Drains for FD-SOI Technology by Carbon Incorporation. *ECS Transactions*, **2016**, 75, 29-38	1	4
32	Convenient graphene-based quantum Hall resistance standards **2016**,		1
31	Shape transition in nano-pits after solid-phase etching of SiO2 by Si islands. *Applied Physics Letters*, **2015**, 106, 191601	3.4	8
30	Quantum Hall resistance standard in graphene devices under relaxed experimental conditions. *Nature Nanotechnology*, **2015**, 10, 965-71	28.7	108
29	Self-propelled motion of AuSi droplets on Si(111) mediated by monoatomic step dissolution. *Surface Science*, **2015**, 632, 1-8	1.8	24
28	Magnetic properties of self-organized Co dimer nanolines on Si/Ag(110). *Beilstein Journal of Nanotechnology*, **2015**, 6, 777-84	3	5
27	In-Plane Si Nanowire Growth Mechanism in Absence of External Si Flux. *Nano Letters*, **2015**, 15, 4788-92	11.5	15
26	Tuning the transport properties of graphene films grown by CVD on SiC(0001): Effect of in situ hydrogenation and annealing. *Physical Review B*, **2014**, 89,	3.3	23
25	Combining low-energy electron microscopy and scanning probe microscopy techniques for surface science: development of a novel sample-holder. *Review of Scientific Instruments*, **2014**, 85, 043705	1.7	10
24	Oxygen-induced inhibition of silicon-on-insulator dewetting. *Applied Physics Letters*, **2014**, 104, 061603	3.4	7
23	Nonequilibrium diffusion of reactive solid islands. *Physical Review B*, **2014**, 89,	3.3	10
22	Growth of Si ultrathin films on silver surfaces: Evidence of an Ag(110) reconstruction induced by Si. *Physical Review B*, **2013**, 88,	3.3	37
21	Dynamics and instability of solid-state dewetting. *Comptes Rendus Physique*, **2013**, 14, 578-589	1.4	21
20	X-Ray Diffraction and Raman Spectroscopy Study of Strain in Graphene Films Grown on 6H-SiC(0001) Using Propane-Hydrogen-Argon CVD. *Materials Science Forum*, **2013**, 740-742, 117-120	0.4	10
19	Agglomeration dynamics of germanium islands on a silicon oxide substrate: A grazing incidence small-angle x-ray scattering study. *Applied Physics Letters*, **2013**, 102, 161603	3.4	16
18	Influence of facets on solid state dewetting mechanisms: Comparison between Ge and Si on SiO2. *Physical Review B*, **2013**, 88,	3.3	22

17	Micromagnetic study of flux-closure states in Fe dots using quantitative Lorentz microscopy. *Ultramicroscopy*, **2012**, 115, 26-34	3.1	4
16	Dynamics, anisotropy, and stability of silicon-on-insulator dewetting fronts. *Physical Review B*, **2012**, 85,	3.3	39
15	Stress effects on solid-state dewetting of nano-thin films. *International Journal of Nanotechnology*, **2012**, 9, 396	1.5	14
14	Dewetting dynamics of silicon-on-insulator thin films. *Physical Review B*, **2011**, 84,	3.3	56
13	Dynamics of solid thin-film dewetting in the silicon-on-insulator system. *New Journal of Physics*, **2011**, 13, 043017	2.9	61
12	Dimensionality crossover in magnetism: from domain walls (2D) to vortices (1D). *Physical Review Letters*, **2010**, 104, 127204	7.4	23
11	Thermal instability of silicon-on-insulator thin films measured by low-energy electron microscopy. *IOP Conference Series: Materials Science and Engineering*, **2010**, 12, 012016	0.4	16
10	Asymmetric Hysteresis of Nēl Caps in Flux-Closure Magnetic Dots. *IEEE Transactions on Magnetics*, **2010**, 46, 1552-1555	2	6
9	Tunable magnetic properties of arrays of Fe(110) nanowires grown on kinetically grooved W(110) self-organized templates. *Journal of Magnetism and Magnetic Materials*, **2010**, 322, 257-264	2.8	7
8	Controlled switching of Nēl caps in flux-closure magnetic dots. *Physical Review Letters*, **2009**, 102, 107201	7.4	23
7	Contacting individual Fe(110) dots in a single electron-beam lithography step. *Nanotechnology*, **2009**, 20, 285302	3.4	2
6	Micromagnetic Modeling on self-assembled iron nanostructures. *ESAIM: Proceedings and Surveys*, **2008**, 22, 118-121		
5	X-ray photoelectron emission microscopy in combination with x-ray magnetic circular dichroism investigation of size effects on field-induced Nēl-cap reversal. *Journal of Applied Physics*, **2008**, 103, 07D915	2.5	6
4	Growth and magnetism of self-organized arrays of Fe(110) wires formed by deposition on kinetically grooved W(110). *Surface Science*, **2007**, 601, 4358-4361	1.8	6
3	Electron Microscopy Investigation of Magnetization Process in Thin Foils and Nanostructures. *Materials Research Society Symposia Proceedings*, **2007**, 1026, 1		
2	Growth modes of Fe(110) revisited: a contribution of self-assembly to magnetic materials. *Journal of Physics Condensed Matter*, **2007**, 19, 053001	1.8	38
1	Influence of polymer-blend morphology on charge transport and photocurrent generation in donor-acceptor polymer blends. *Nano Letters*, **2006**, 6, 1674-81	11.5	91