Sergey N Filimonov

List of Publications by Year
in descending order

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35	402	933447 10	794594 19
papers	citations	h-index	g-index

35	35	35	456
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular switches from benzene derivatives adsorbed on metal surfaces. Nature Communications, 2013, 4, 2569.	12.8	82
2	Switchable Schottky Contacts: Simultaneously Enhanced Output Current and Reduced Leakage Current. Journal of the American Chemical Society, 2019, 141, 1628-1635.	13.7	43
3	Terrace-edge-kink model of atomic processes at the permeable steps. Surface Science, 2004, 553, 133-144.	1.9	40
4	Scaling of submonolayer island sizes in surfactant-mediated epitaxy of semiconductors. Physical Review B, 2004, 70, .	3.2	23
5	Identification ofGe/SiIntermixing Processes at theBi/Ge/Si(111)Surface. Physical Review Letters, 2007, 98, 166104.	7.8	21
6	Dislocation networks in conventional and surfactant-mediated Ge/Si(111) epitaxy. Surface Science, 2005, 599, 76-84.	1.9	20
7	Multistage nucleation of two-dimensional Si islands on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:mrow> MBE growth: STM experiments and extended rate-equation model. Physical Review B, 2007, 76, .	3.2	19
8	Principles of Design for Substrate-Supported Molecular Switches Based on Physisorbed and Chemisorbed States. ACS Applied Materials & Interfaces, 2018, 10, 26772-26780.	8.0	15
9	In Situ SR-XPS Observation of Ni-Assisted Low-Temperature Formation of Epitaxial Graphene on 3C-SiC/Si. Nanoscale Research Letters, 2015, 10, 421.	5.7	14
10	Model of step propagation and step bunching at the sidewalls of nanowires. Journal of Crystal Growth, 2015, 427, 60-66.	1.5	12
11	â€œRotatingâ€•steps in Si(001) homoepitaxy. Surface Science, 2004, 549, 31-36.	1.9	10
12	Growth Rate Anomaly in Ultralow-Pressure Chemical Vapor Deposition of 3C-SiC on Si(001) Using Monomethylsilane. Japanese Journal of Applied Physics, 2011, 50, 010203.	1.5	10
13	<i>Ab Initio</i> Calculations of Absolute Surface Energies of Clean and Hydrogen Covered 3C-SiC(001), (110) and (111) Surfaces. Materials Science Forum, 0, 821-823, 363-366.	0.3	8
14	Growth Rate Anomaly in Ultralow-Pressure Chemical Vapor Deposition of 3C-SiC on Si(001) Using Monomethylsilane. Japanese Journal of Applied Physics, 2011, 50, 010203.	1.5	8
15	Rotated Epitaxy of 3C-SiC(111) on Si(110) Substrate Using Monomethylsilane-Based Gas-Source Molecular-Beam Epitaxy. Materials Science Forum, 0, 740-742, 339-343.	0.3	7
16	Step bunching and step â€œrotationâ€•in homoepitaxial growth of Si on Si(110)-16Ã—2. Surface Science, 2011, 605, 838-843.	1.9	6
17	Kinetics of two-dimensional island nucleation on reconstructed surfaces. Physical Review B, 2012, 85, .	3.2	6
18	Silicon Carbide on Silicon (110): Surface Structure and Mechanisms of Epitaxial Growth. Russian Physics Journal, 2014, 56, 1439-1444.	0.4	6

#	Article	IF	Citations
19	Formation of qualified epitaxial graphene on Si substrates using two-step heteroexpitaxy of C-terminated 3C-SiC(-1-1-1) on Si(110). Diamond and Related Materials, 2016, 67, 51-53.	3.9	6
20	Molecular Seesaw: Intricate Dynamics and Versatile Chemistry of Heteroaromatics on Metal Surfaces. Journal of Physical Chemistry Letters, 2017, 8, 1235-1240.	4.6	6
21	Si nucleation on Si(111)-7Ã—7: From cluster pairs to 2D islands. Surface Science, 2007, 601, 3876-3880.	1.9	5
22	Selective Adsorption of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math>on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ge</mml:mi><mml:mo>/</mml:mo><mml:mi>Si</mml:mi></mml:math>Nanostructures. Physical Review Letters, 2012, 108, 116101.	7.8	5
23	Kinetics of Step Propagation at the Sidewalls of 3D Islands and Nanowires. E-Journal of Surface Science and Nanotechnology, 2014, 12, 68-74.	0.4	4
24	Evaluations of crystal defects of 3C-SiC(1Â¯1Â¯1Â¯) film on Si(110) substrate. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1125-1129.	1.8	4
25	Surface Strain-Induced Collective Switching of Ensembles of Molecules on Metal Surfaces. Journal of Physical Chemistry Letters, 2020, 11, 2277-2283.	4.6	4
26	Influence of strain on binding energies of Si atoms at Ge() surfaces. Surface Science, 2002, 512, L335-L340.	1.9	3
27	Step permeability effect and interlayer mass-transport in the Ge/Si(111) MBE. Materials Science in Semiconductor Processing, 2005, 8, 31-34.	4.0	3
28	Kink-formation kinetics and submonolayer density of magic two-dimensional islands in molecular beam epitaxy. Physical Review E, 2009, 80, 051603.	2.1	3
29	Low-Temperature, Low-Pressure and Ultrahigh-Rate Growth of Single-Crystalline 3C-SiC on Si Substrate by ULP-CVD Using Organosilane. Materials Science Forum, 2010, 645-648, 147-150.	0.3	2
30	Step Flow Model of Radial Growth and Shape Evolution of Semiconductor Nanowires. Russian Physics Journal, 2016, 59, 1206-1212.	0.4	2
31	Kinetic Model of the Initial Stage of the Nanowire Growth. Russian Physics Journal, 2018, 60, 2040-2043.	0.4	2
32	Direct measurement of surface stress during Bi-mediated Ge growth on Si. Surface Science, 2013, 609, 157-160.	1.9	1
33	High-Rate Rotated Epitaxy of 3C-SiC(111) on Si(110) Substrate for Qualified Epitaxial Graphene on Silicon. Materials Science Forum, 0, 740-742, 327-330.	0.3	1
34	On the Influence of Transitions Between Distinct Adsorption States on the Desorption Kinetics of Molecules. Russian Physics Journal, 2016, 59, 762-767.	0.4	1
35	Monte Carlo Simulations of the Adsorption of Anisotropic Noninteracting Molecules on the (111) Surface of a FCC Crystal. Russian Physics Journal, 2016, 58, 1676-1680.	0.4	0