

Dimitry Gruznev

List of Publications by Year in descending order

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docs citations

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times ranked

648
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-Dimensional Superconductor with a Giant Rashba Effect: One-Atom-Layer Tl-Pb Compound on Si(111). <i>Physical Review Letters</i> , 2015, 115, 147003.	7.8	108
2	A Strategy to Create Spin-Split Metallic Bands on Silicon Using a Dense Alloy Layer. <i>Scientific Reports</i> , 2014, 4, 4742.	3.3	65
3	Large spin splitting of metallic surface-state bands at adsorbate-modified gold/silicon surfaces. <i>Scientific Reports</i> , 2013, 3, 1826.	3.3	51
4	Si(111) $\sqrt{3}\times\sqrt{3}$ R $\bar{1}$ phase modified by In adsorption: Stabilization of a homogeneous surface by stress relief. <i>Physical Review B</i> , 2006, 73, .	3.2	44
5	Reversible phase transitions in the pseudomorphic $\sqrt{3}\times\sqrt{3}$ -hex In layer on Si(111). <i>Physical Review B</i> , 2006, 74, .	3.2	31
6	Stepwise self-assembly of C60 mediated by atomic scale moiré magnifiers. <i>Nature Communications</i> , 2013, 4, 1679.	12.8	31
7	Multi-mode growth in Cu/Si(111) system: Magic nanoclustering, layer-by-layer epitaxy and nanowire formation. <i>Surface Science</i> , 2008, 602, 391-398.	1.9	30
8	Superconductivity in thallium double atomic layer and transition into an insulating phase intermediated by a quantum metal state. <i>2D Materials</i> , 2017, 4, 025020.	4.4	30
9	Electronic band structure of a Tl/Sn atomic sandwich on Si(111). <i>Physical Review B</i> , 2015, 91, .	3.2	25
10	Modulated $\sqrt{3}\times\sqrt{3}$ C $\sqrt{3}\times\sqrt{3}$ monolayer on Si(111). <i>Physical Review B</i> , 2015, 91, .	3.2	23
11	Two-Dimensional In $\sqrt{3}\times\sqrt{3}$ Sb Compound on Silicon as a Quantum Spin Hall Insulator. <i>Nano Letters</i> , 2018, 18, 4338-4345.	9.1	23
12	Synthesis of two-dimensional Tl $_x$ Bi $_{1-x}$ compounds and Archimedean encoding of their atomic structure. <i>Scientific Reports</i> , 2016, 6, 19446.	3.3	21
13	Surface structure evolution during Sb adsorption on Si(1 1 1) $\sqrt{3}\times\sqrt{3}$ In(4 \times 1) reconstruction. <i>Applied Surface Science</i> , 2002, 190, 134-138.	6.1	18
14	Atomic structure and electronic properties of the In/Si(111) $\sqrt{3}\times\sqrt{3}$ surface. <i>Physical Review B</i> , 2014, 89, .	3.2	18
15	Thallene: graphene-like honeycomb lattice of Tl atoms frozen on single-layer NiSi $_2$. <i>2D Materials</i> , 2020, 7, 045026.	4.4	17
16	One-atom-layer compounds on silicon and germanium. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 08LA01.	1.5	14
17	Size distributions of fullerene surface clusters. <i>Applied Surface Science</i> , 2014, 307, 46-51.	6.1	13
18	Surfactant mediated growth of Sb clusters on Si(111) surface. <i>Journal of Crystal Growth</i> , 2004, 269, 235-241.	1.5	12

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19	C60 adsorption onto the one-atomic-layer In films on Si(111) surface. Surface Science, 2011, 605, 1951-1955.	1.9	12
20	Peculiar diffusion of C60 on In-adsorbed Si(111)-Au surface. Surface Science, 2013, 616, 44-50.	1.9	12
21	Atomic structure and electronic properties of the two-dimensional $\text{Au}_{1-x}\text{In}_x$ alloy. Physical Review B, 2015, 92, .		
22	Low-temperature one-atom-layer $\sqrt{7}\times\sqrt{7}$ -In phase on Si(111). Surface Science, 2016, 649, 14-19.	1.9	12
23	Theory versus experiment for a family of single-layer compounds with a similar atomic arrangement: $\sqrt{7}\times\sqrt{7}$ -In phase on Si(111).		

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37	Au-induced reconstructions of the Si(111) surface with ordered and disordered domain walls. Physical Review B, 2020, 101, .	3.2	9
38	One-dimensional spin-polarized electron channel in the two-dimensional PbBi compound on silicon. Physical Review B, 2021, 104, .	3.2	9
39	Structural Transformations During Sb Adsorption on Si(111)â€“In(4Å–1) Reconstruction. Japanese Journal of Applied Physics, 2001, 40, 4304-4308.	1.5	8
40	Tailoring of spin-split metallic surface-state bands on silicon. Journal of Electron Spectroscopy and Related Phenomena, 2015, 201, 81-87.	1.7	8
41	C60 capping of metallic 2D Tl-Au compound with preservation of its basic properties at the buried interface. Applied Surface Science, 2020, 501, 144253.	6.1	8
42	Surface reconstructions in Pb/Si(100) system: Composition and atomic arrangement. Surface Science, 2020, 695, 121574.	1.9	8
43	Growth-temperature-dependent role of In(4Å–1) surface phase for the heteroepitaxy of InSb on Si(111). Journal of Applied Physics, 2000, 87, 724-729.	2.5	7
44	Self-assembly of conductive Cu nanowires on Si(111)â€“5 Å– 5 â€™-Cu surface. Nanotechnology, 2008, 19, 245608.	2.6	7
45	Structural transformations in Pb/Si(111) phases induced by C₆₀ adsorption. Journal of Physics Condensed Matter, 2013, 25, 395006.	1.8	7
46	Adsorbate-induced modification of electronic band structure of epitaxial Bi(111) films. Applied Surface Science, 2017, 406, 122-127.	6.1	7
47	One-atom-layer 4Å–4 compound in (Tl, Pb)/Si(111) system. Surface Science, 2017, 657, 63-68.	1.9	7
48	From C60 â€œtrilliumsâ€œ to â€œtrilliumenesâ€œ: Self-assembly of 2D fullerene nanostructures on metal-covered silicon and germanium. Journal of Chemical Physics, 2018, 149, 034702.	3.0	7
49	Effect of In(4Å–1) Reconstruction Induced Interface Modification on the Growth Behavior of InSb on Si(111) Substrate. Japanese Journal of Applied Physics, 2000, 39, 3935-3942.	1.5	6
50	Interplay between adsorbed C60 fullerenes and point defects on a Si(111) reconstructed surface. Surface Science, 2011, 605, 2050-2054.	1.9	6
51	Atomic arrangement and electron band structure of Si(1 1 1)-ÅŸ-\$\sqrt{3}\$imes \$\sqrt{3}\$-Bi reconstruction modified by alkali-metal adsorption:ab initiostudy. Journal of Physics Condensed Matter, 2015, 27, 305003.	1.8	6
52	New method for MBE growth of GaAs nanowires on silicon using colloidal Au nanoparticles. Nanotechnology, 2018, 29, 045602.	2.6	6
53	Metal Sheet of Atomic Thickness Embedded in Silicon. ACS Nano, 2021, 15, 19357-19363.	14.6	6

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55	Twinned InSb molecular layer on Si(111) substrate. Surface Science, 2001, 493, 373-380.	1.9	5
56	Sb adsorption on Si(111)- $\sqrt{3}\times\sqrt{3}$ surface phase. Applied Surface Science, 2001, 175-176, 187-194.	6.1	5
57	Growth of Au thin film on Cu-modified Si(111) surface. Surface Science, 2009, 603, 3400-3403.	1.9	5
58	Diffusion and clustering of adatoms on discommensurate surface template: Ge atoms on Si(111)- $\sqrt{5}\times\sqrt{5}$ -Cu reconstruction. Surface Science, 2010, 604, 666-673.	1.9	5
59	Atomic and electronic structures of Ag/Si(100)- $\sqrt{2}\times\sqrt{2}$ surface: A first-principles study. Surface Science, 2010, 604, 1400-1405.	1.9	5
60	Magic C60 islands forming due to moiré interference between islands and substrate. Surface Science, 2015, 635, 94-98.	1.9	5
61	Two-dimensional metallic (Tl,Au)/Si(100)- $\sqrt{2}\times\sqrt{2}$: A Rashba-type system with C _{2v} symmetry. Physical Review B, 2018, 98, .	3.2	5
62	Double-atomic-layer Tl-Mg compound on a Si(111) surface with advanced electronic properties. Physical Review B, 2020, 101, .	3.2	5
63	Electronic and transport properties of Pb-dense reconstructions on Si(100). Surface Science, 2021, 708, 121822.	1.9	5
64	Structural and electronic effects of adsorbed Bi on the metallic atomic chains in Au/Si(111)- $\sqrt{5}\times\sqrt{5}$. Applied Surface Science, 2021, 558, 149859.	6.1	5
65	Insights Into the Electronic Properties of PbBi Atomic Layers on Ge(111) and Si(111) Surfaces. Frontiers in Materials, 2022, 9, .	2.4	5
66	Studying the electric conductivity of the Si(100)- $\sqrt{2}\times\sqrt{2}$ -Al surface phase during deposition of indium and aluminum. Technical Physics Letters, 2005, 31, 1068-1070.	0.7	4
67	Growth of In nanocrystallite arrays on the Si(100)- $\sqrt{2}\times\sqrt{2}$ -Al surface. Surface Science, 2006, 600, 4986-4991.	1.9	4
68	(Tl, Au)/Si($\sqrt{7}\times\sqrt{7}$) 2D compound: an ordered array of identical Au clusters embedded in Tl matrix. Journal of Physics Condensed Matter, 2018, 30, 025002.	1.8	4
69	Pb/NiSi ₂ atomic sandwich on Si(111). Surface Science, 2022, 716, 121966.	1.9	4
70	Single and double In atomic layers grown on top of a single atomic NiSi ₂ layer on Si(111). Physical Review B, 2022, 106, .	3.2	4
71	Role of In $\sqrt{3}\times\sqrt{3}$ superstructure on the heteroepitaxy of InSb on Si(111) substrate. Applied Surface Science, 2000, 162-163, 263-269.	6.1	3
72	Effect of Si(100)- $\sqrt{2}\times\sqrt{2}$ -Al and Si(111)-(5.55 \times 5.55)-Cu reconstructions on the deposition of cobalt onto silicon surface. Technical Physics Letters, 2010, 36, 100-103.	0.7	3

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73	Broken Even-Odd Symmetry in Self-Selection of Distances between Nanoclusters due to the Presence or Absence of Topological Solitons. <i>Physical Review Letters</i> , 2011, 106, 166101.	7.8	3
74	Surface conduction at phase transitions in (Au,Ag)/Si(111) submonolayer films. <i>Applied Surface Science</i> , 2012, 258, 9636-9641.	6.1	3
75	Comparative STM analysis of C60 and C70 fullerene adsorption sites on pristine and Al-modified Si(111) $\sqrt{7} \times \sqrt{7}$ surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016, 34, 061402.	3.4	3
76	2D Tl-Pb compounds on Ge(111) surface: atomic arrangement and electronic band structure. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 035001.	1.8	3
77	Electronic properties of the two-dimensional (Tl, Rb)/Si(111) $\sqrt{3} \times \sqrt{3}$ compound having a honeycomb-like structure. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 415502.	1.8	3
78	The array of In-Bi heterodimers on the Si(100) surface. <i>Surface Science</i> , 2020, 694, 121557.	1.9	3
79	Kondo effect at ultimate atomic-scale two-dimensional limit: Au/Si(111) $\sqrt{3} \times \sqrt{3}$ reconstruction with embedded Cr atoms. <i>Physical Review B</i> , 2020, 102, .	3.2	3
80	Superconducting proximity effect in a Rashba-type surface state of Pb/Ge(111). <i>Superconductor Science and Technology</i> , 2020, 33, 075007.	3.5	3
81	Study of Sb adsorption on the Si(0 0 1) $\sqrt{3} \times \sqrt{3}$ surface. <i>Applied Surface Science</i> , 2003, 216, 35-40.	6.1	2
82	Growth of copper nanoislands on the Si(100)-c(4 $\sqrt{3} \times \sqrt{3}$)-Al surface studied by scanning tunneling microscopy. <i>Technical Physics Letters</i> , 2007, 33, 912-914.	0.7	2
83	Relative stabilities of adsorbed versus substitutional Al atoms in submonolayer $\sqrt{3} \times \sqrt{3}$ Al/Si(111). <i>Physical Review B</i> , 2008, 78, .	3.2	2
84	Thickness Dependence of Surface Structure and Superconductivity in Pb Atomic Layers. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 113601.	1.6	2
85	Atomic, electronic and transport properties of In-Au 2D compound on Si(100). <i>Journal of Physics Condensed Matter</i> , 2020, 32, 135003.	1.8	2
86	Incommensurate superstructure in heavily doped fullerene layer on Bi/Si(111) surface. <i>Journal of Chemical Physics</i> , 2015, 143, 074707.	3.0	1
87	(Tl, Sb) and (Tl, Bi) binary surface reconstructions on Ge(111) substrate. <i>Surface Science</i> , 2018, 669, 183-188.	1.9	1
88	Solving a Long-Standing Problem Regarding Atomic Structure of Si(100) $\sqrt{3} \times \sqrt{3}$ -Ag. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9584-9587.	4.6	1
89	Self-assembly of C60 layers at Tl/NiSi ₂ atomic sandwich on Si(111). <i>Surface Science</i> , 2022, 715, 121934.	1.9	1
90	2D system incorporating perforated Mg sheet sandwiched between Pb layer and Si(111). <i>Applied Surface Science</i> , 2022, 589, 152951.	6.1	1

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91	Modification of the sample holder for a variable temperature scanning tunneling microscope (Omicron). Instruments and Experimental Techniques, 2013, 56, 745-748.	0.5	0
92	ELECTRICAL CONDUCTIVITY STUDY OF Au AND Na COADSORBED Si(111) SURFACE. , 2013, , .		0
93	Sodium Doping of Bi/Si(111) Ultra-Thin Films. Solid State Phenomena, 2014, 213, 65-70.	0.3	0
94	Formation of a double-layer Pb reconstruction on the B-segregated Si(111) surface. Surface Science, 2021, 706, 121784.	1.9	0
95	Observation of Superconductivity on the Rashba-Type Surface Reconstruction (Tl, Pb)/Si(111) by <i>in situ</i> Electrical Transport Measurements. Hyomen Kagaku, 2016, 37, 363-368.	0.0	0
96	10.1063/1.5038790.1. , 2018, , .		0
97	Modification of Sb/Si(001) interface by incorporation of In(4 Å ⁻³) surface reconstruction. Applied Surface Science, 2004, 237, 99-104.	6.1	0
98	High quality Mg(0001) films grown on Si(111) $\sqrt{3} \times \sqrt{3}$ surface reconstruction. Applied Surface Science, 2022, 754, 139317.	1.8	0