

Mikhail M Otrokov

List of Publications by Year in descending order

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63
papers

3,404
citations

159358

30
h-index

138251

58
g-index

63
all docs

63
docs citations

63
times ranked

2871
citing authors

#	ARTICLE	IF	CITATIONS
1	Prediction and observation of an antiferromagnetic topological insulator. <i>Nature</i> , 2019, 576, 416-422.	13.7	701
2	Unique Thickness-Dependent Properties of the van der Waals Interlayer Antiferromagnet $\langle \text{MnBi} \rangle_2 \langle \text{Mn} \rangle_2$. <i>Physical Review Letters</i> , 2019, 122, 107202.	2.9	415
3	Highly-ordered wide bandgap materials for quantized anomalous Hall and magnetoelectric effects. <i>2D Materials</i> , 2017, 4, 025082.	2.0	195
4	Tunable 3D/2D magnetism in the (MnBi ₂ Te ₄)(Bi ₂ Te ₃) _m topological insulators family. <i>Npj Quantum Materials</i> , 2020, 5, .	1.8	138
5	Surface states and Rashba-type spin polarization in antiferromagnetic $\langle \text{MnBi} \rangle_2 \langle \text{Mn} \rangle_2$ (0001). <i>Physical Review B</i> , 2019, 100, .	1.6	132
6	Novel ternary layered manganese bismuth tellurides of the MnTe-Bi ₂ Te ₃ system: Synthesis and crystal structure. <i>Journal of Alloys and Compounds</i> , 2019, 789, 443-450.	2.8	130
7	Spatial variation of a giant spin-orbit effect induces electron confinement in graphene on Pb islands. <i>Nature Physics</i> , 2015, 11, 43-47.	6.5	126
8	Observation of Single-Spin Dirac Fermions at the Graphene/Ferromagnet Interface. <i>Nano Letters</i> , 2015, 15, 2396-2401.	4.5	82
9	Spin-Orbit Coupling Induced Gap in Graphene on Pt(111) with Intercalated Pb Monolayer. <i>ACS Nano</i> , 2017, 11, 368-374.	7.3	78
10	Mn-Rich MnSb ₂ Te ₄ : A Topological Insulator with Magnetic Gap Closing at High Curie Temperatures of 45-50 K. <i>Advanced Materials</i> , 2021, 33, e2102935.	11.1	70
11	Magnetic extension as an efficient method for realizing the quantum anomalous hall state in topological insulators. <i>JETP Letters</i> , 2017, 105, 297-302.	0.4	68
12	Nature of the Dirac gap modulation and surface magnetic interaction in axion antiferromagnetic topological insulator $\langle \text{MnBi} \rangle_2 \langle \text{Te} \rangle_4$. <i>Scientific Reports</i> , 2020, 10, 13226.	1.6	62
13	Competing rhombohedral and monoclinic crystal structures in $\langle \text{Mn} \rangle_2 \langle \text{Mn} \rangle_2$ compounds: An ab-initio study. <i>Journal of Alloys and Compounds</i> , 2017, 709, 172-178.	2.8	58
14	Band Structure Engineering in Topological Insulator Based Heterostructures. <i>Nano Letters</i> , 2013, 13, 6064-6069.	4.5	57
15	Exchange interaction and its tuning in magnetic binary chalcogenides. <i>Physical Review B</i> , 2014, 89, .	1.1	57
16	Signatures of temperature driven antiferromagnetic transition in the electronic structure of topological insulator MnBi ₂ Te ₄ . <i>APL Materials</i> , 2020, 8, .	2.2	56
17	Large-Scale Sublattice Asymmetry in Pure and Boron-Doped Graphene. <i>Nano Letters</i> , 2016, 16, 4535-4543.	4.5	55
18	Native point defects and their implications for the Dirac point gap at MnBi ₂ Te ₄ (0001). <i>Npj Quantum Materials</i> , 2022, 7, .	1.8	53

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19	New Universal Type of Interface in the Magnetic Insulator/Topological Insulator Heterostructures. Nano Letters, 2018, 18, 6521-6529.	4.5	51
20	Epitaxial B-Graphene: Large-Scale Growth and Atomic Structure. ACS Nano, 2015, 9, 7314-7322.	7.3	49
21	Fabrication of a novel magnetic topological heterostructure and temperature evolution of its massive Dirac cone. Nature Communications, 2020, 11, 4821.	5.8	47
22	Sample-dependent Dirac-point gap in MnBi_2 and its response to applied surface charge: A combined photoemission and <i>ab initio</i> study. Physical Review B, 2021, 104.	1.1	46
23	Tuning the Dirac Point Position in Bi_2Te_3 by <i>in situ</i> Etching. Nano Letters, 2014, 14, 1166-1170.	1.1	46
24	Manipulating the Topological Interface by Molecular Adsorbates: Adsorption of Co-Phthalocyanine on Bi_2Se_3 . Nano Letters, 2016, 16, 3409-3414.	4.5	44
25	Atomic relaxations at the (0001) surface of Bi_2Te_3 crystals and ultrathin films. Physical Review B, 2014, 90.	1.1	44
26	Visualizing spin-dependent bulk scattering and breakdown of the linear dispersion relation in Bi_2Te_3 . Physical Review B, 2013, 88.	1.1	34
27	Surface alloying and iron selenide formation in Bi_2Te_3 by x-ray absorption fine structure experiments. Physical Review B, 2015, 92, .	1.1	33
28	Evidence of large spin-orbit coupling effects in quasi-free-standing graphene on $\text{Pb}/\text{Ir}(1\bar{1}0)$. 2D Materials, 2018, 5, 035029.	2.0	33
29	Spectroscopic perspective on the interplay between electronic and magnetic properties of magnetically doped topological insulators. Physical Review B, 2017, 96, .	1.1	32
30	Magneto-Spin-Orbit Graphene: Interplay between Exchange and Spin-Orbit Couplings. Nano Letters, 2018, 18, 1564-1574.	4.5	32
31	Topological Magnetic Materials of the $(\text{MnSb}_2\text{Te}_4)_x(\text{Sb}_2\text{Te}_3)_{1-x}$ van der Waals Compounds Family. Journal of Physical Chemistry Letters, 2021, 12, 4268-4277.	2.1	30
32	Robust and tunable itinerant ferromagnetism at the silicon surface of the antiferromagnet GdRh_2Si_2 . Scientific Reports, 2016, 6, 24254.	1.6	29
33	Spin Orientation of Two-Dimensional Electrons Driven by Temperature-Tunable Competition of Spin-Orbit and Exchange-Magnetic Interactions. Nano Letters, 2017, 17, 811-820.	4.5	28
34	Atomic and electronic structure of bismuth-bilayer-terminated Bi_2Te_3 prepared by atomic hydrogen etching. Physical Review B, 2015, 91, .	1.1	28
35	Electronic structure and dielectric function of Mn-Bi-Te layered compounds. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2019, 37, .	0.6	21
36	Natural sulfur-containing minerals as topological insulators with a wide band gap. JETP Letters, 2012, 96, 322-325.	0.4	20

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37	Domain wall induced spin-polarized flat bands in antiferromagnetic topological insulators. Physical Review B, 2021, 103, .	1.1	20
38	Breaking time-reversal symmetry at the topological insulator surface by metal-organic coordination networks. Physical Review B, 2015, 92, .	1.1	18
39	Efficient step-mediated intercalation of silver atoms deposited on the Bi ₂ Se ₃ surface. JETP Letters, 2013, 96, 714-718.	0.4	16
40	Strong spin-orbit coupling in the noncentrosymmetric Kondo lattice. Physical Review B, 2018, 98, .	1.1	16
41	Classical and cubic Rashba effect in the presence of in-plane magnetism at the iridium silicide surface of the antiferromagnet Physical Review B, 2021, 103, .	1.1	15
42	Giant Magnetic Band Gap in the Rashba-Split Surface State of Vanadium-Doped BiTeI: A Combined Photoemission and Ab Initio Study. Scientific Reports, 2017, 7, 3353.	1.6	14
43	Large Perpendicular Magnetic Anisotropy in Nanometer-Thick Epitaxial Graphene/Co/Heavy Metal Heterostructures for Spin-Orbitronics Devices. ACS Applied Nano Materials, 2021, 4, 4398-4408.	2.4	13
44	Infrared study of the multiband low-energy excitations of the topological antiferromagnet Physical Review B, 2021, 103, .	1.1	13
45	Ab initio study of the magnetic ordering in Si/Mn digital alloys. Physical Review B, 2011, 84, .	1.1	12
46	Instability of the topological surface state in Bi ₂ Te ₃ upon deposition of gold. Physical Review B, 2017, 95, .	1.1	12
47	Ab initio study of the adsorption, diffusion, and intercalation of alkali metal atoms on the (0001) surface of the topological insulator Bi ₂ Se ₃ . Journal of Experimental and Theoretical Physics, 2015, 121, 465-476.	0.2	11
48	Low-coverage surface diffusion in complex periodic energy landscapes: Analytical solution for systems with symmetric hops and application to intercalation in topological insulators. Physical Review B, 2016, 93, .	1.1	11
49	Magnetic Properties of Metal-Organic Coordination Networks Based on 3d Transition Metal Atoms. Molecules, 2018, 23, 964.	1.7	9
50	Magnetic ordering in digital alloys of group-IV semiconductors with 3d-transition metals. Journal of Experimental and Theoretical Physics, 2011, 112, 625-636.	0.2	8
51	Geometric and electronic structure of the Cs-doped Bi ₂ Te ₃ (0001) surface. Physical Review B, 2017, 95, .	1.1	8
52	Intralayer magnetic ordering in Ge/Mn digital alloys. Physical Review B, 2011, 83, .	1.1	7
53	Search for stable ferromagnets among digital alloys (Tj ETQq1 1 0.784314 rgBT /Overlack 10 Tf 50 97 Td	1.1	7
54	TCNQ Physisorption on the Topological Insulator Bi ₂ Se ₃ . ChemPhysChem, 2018, 19, 2405-2410.	1.0	6

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55	Magnetic ordering and topology in Mn_2Mn and Mn_2Mn . Physical Review B, 2022, 105, .	1.1	6
56	Digital magnetic heterostructures based on Si and Fe. Physics of the Solid State, 2010, 52, 1680-1687.	0.2	5
57	Origin of two-dimensional electronic states at Si- and Gd-terminated surfaces of GdRh_2Si_2 (001). Physical Review B, 2019, 100, .	1.1	4
58	Low-coverage surface diffusion in complex periodic energy landscapes. II. Analytical solution for systems with asymmetric hops. Physical Review B, 2016, 93, .	1.1	3
59	The Charge Transport Mechanism in a New Magnetic Topological Insulator $\text{MnBi}_0.5\text{Sb}_{1.5}\text{Te}_4$. Physics of the Solid State, 2021, 63, 1120-1125.	0.2	2
60	Reply to "Comment on "Spin-Orbit Coupling Induced Gap in Graphene on Pt(111) with Intercalated Pb Monolayer". ACS Nano, 2017, 11, 10630-10632.	7.3	1
61	Reply to "Comment on "Instability of the topological surface state in Bi_2Se_3 upon deposition of gold". Physical Review B, 2018, 98, .	1.1	1
62	Persistence of the Topological Surface States in Bi_2Se_3 against Ag Intercalation at Room Temperature. Journal of Physical Chemistry C, 2021, 125, 1784-1792.	1.5	1
63	Impact of Co Atoms on the Electronic Structure of Bi_2Te_3 and MnBi_2Te_4 Topological Insulators. Journal of Experimental and Theoretical Physics, 2022, 134, 607-614.	0.2	0