

# Sergey Marenkin

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Formation of the $\hat{\chi}$ -phase and study of the solubility of Mn in Cd <sub>3</sub> As <sub>2</sub> . <i>Journal of Alloys and Compounds</i> , 2022, 892, 162082.	2.8	5
2	Pressure-induced magnetic transformations in Cd <sub>3</sub> As <sub>2</sub> +MnAs hybrid composite. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	1
3	Electronic, magnetic and magnetotransport properties of Mn-doped Dirac semimetal Cd <sub>3-x</sub> Mn <sub>x</sub> As. <i>Acta Materialia</i> , 2021, 219, 117349.	3.8	8
4	Magnetometric Studies of Composite Alloys of the Cd <sub>3</sub> As <sub>2</sub> -MnAs System. <i>Russian Journal of Inorganic Chemistry</i> , 2021, 66, 1544-1548.	0.3	1
5	Spin-Polarized Electric Current in Cd <sub>48.6</sub> Mn <sub>11.4</sub> As <sub>40</sub> Nanocomposite. <i>Physics of the Solid State</i> , 2021, 63, 644.	0.2	2
6	Synthesis of bulk crystals and thin films of the ferromagnetic MnSb. <i>Kondensirovannye Sredy Mezhhafaznye Granitysy</i> , 2021, 23, 387-395.	0.1	0
7	Magnetic Anisotropy of Needlelike Single-Crystal MnSb Inclusions in an InSb Matrix. <i>Technical Physics Letters</i> , 2021, 47, 490-493.	0.2	2
8	Electrical Resistance and Magnetoresistance of Cd <sub>3</sub> As <sub>2</sub> -30 mol % MnAs under High Pressures. <i>Physics of the Solid State</i> , 2021, 63, 1301-1304.	0.2	1
9	Cadmium Arsenides: Structure, Synthesis of Bulk and Film Crystals, Magnetic and Electrical Properties (Review). <i>Russian Journal of Inorganic Chemistry</i> , 2021, 66, 2005-2016.	0.3	5
10	The Synthesis and Investigation of the Electrical Properties of Tricadmium Diarsenide with MnAs Nanogranules. <i>Technical Physics</i> , 2020, 65, 1083-1086.	0.2	3
11	Synthesis of Ferromagnetic Alloys Semiconductor-Ferromagnet in the CdAs <sub>2</sub> -MnAs System. <i>Russian Journal of Inorganic Chemistry</i> , 2020, 65, 1219-1225.	0.3	3
12	Superconductivity in Thin Films of the Dirac Semimetal Cd <sub>3</sub> As <sub>2</sub> . <i>Physics of the Solid State</i> , 2020, 62, 419-422.	0.2	4
13	Al-Mn Hard Magnetic Alloys as Promising Materials for Permanent Magnets (Review). <i>Russian Journal of Inorganic Chemistry</i> , 2020, 65, 2007-2019.	0.3	7
14	Fabrication of ZnSe/InP Heterojunctions on Flat and Shaped Surfaces of InP Laser Crystals. <i>Inorganic Materials</i> , 2019, 55, 903-907.	0.2	1
15	Growth of Thin Cadmium Arsenide Films by Magnetron Sputtering and Their Structure. <i>Inorganic Materials</i> , 2019, 55, 879-886.	0.2	8
16	Quantum Corrections and Magnetotransport in 3D Dirac Semimetal Cd <sub>3</sub> $\times$ Mn <sub>x</sub> As <sub>2</sub> Films. <i>Semiconductors</i> , 2019, 53, 1439-1444.	0.2	7
17	Physicochemical Principles Underlying the Synthesis of Granular Semiconductor-Ferromagnet Magnetic Structures Exemplified by Al <sub>x</sub> GeAs <sub>2</sub> (Al = Zn, Cd) Materials. <i>Inorganic Materials</i> , 2019, 55, 865-872.	0.2	8
18	Effect of Hydrostatic Pressures of up to 9 GPa on the Galvanomagnetic Properties of Cd <sub>3</sub> As <sub>2</sub> -MnAs (20 mol % MnAs) Alloy in a Transverse Magnetic Field. <i>Inorganic Materials</i> , 2019, 55, 873-878.	0.2	7

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19	Preparation of Shaped Indium Phosphide Surfaces for Edge-Emitting Devices. <i>Inorganic Materials</i> , 2019, 55, 125-128.	0.2	0
20	Particle Size Effects on Calorimetric and Magnetic Properties of the Ferromagnetic Phase in the Eutectic Composite Alloy of ZnSnAs <sub>2</sub> -MnAs System. <i>Russian Journal of Inorganic Chemistry</i> , 2019, 64, 1494-1498.	0.3	8
21	Thermal Conductivity of Tetragonal Cadmium Diphosphide Crystals. <i>Inorganic Materials</i> , 2018, 54, 237-239.	0.2	4
22	Manganese Pnictides MnP, MnAs, and MnSb are Ferromagnetic Semimetals: Preparation, Structure, and Properties (a Survey). <i>Russian Journal of Inorganic Chemistry</i> , 2018, 63, 1753-1763.	0.3	15
23	Effect of Particle Size on the Magnetostructural Transformation of a Manganese Monoarsenide-Based Phase in the ZnGeAs <sub>2</sub> -MnAs System. <i>Inorganic Materials</i> , 2018, 54, 1187-1192.	0.2	1
24	Aluminum Antimonide Thin Films: Structure and Properties. <i>Russian Journal of Inorganic Chemistry</i> , 2018, 63, 1117-1121.	0.3	3
25	Ferromagnetic-to-Paramagnetic Phase Transition of MnAs Studied by Calorimetry and Magnetic Measurements. <i>Inorganic Materials</i> , 2018, 54, 863-867.	0.2	7
26	Hall effect, electrical and magnetic resistance in Cd <sub>3</sub> As <sub>2</sub> + MnAs (30%) composite at high pressures. <i>Russian Journal of Inorganic Chemistry</i> , 2017, 62, 90-93.	0.3	7
27	Phase equilibria in the CdAs <sub>2</sub> -Cd <sub>3</sub> As <sub>2</sub> -MnAs ternary system. <i>Russian Journal of Inorganic Chemistry</i> , 2017, 62, 976-986.	0.3	11
28	Controlling the phase composition of cadmium sulfide films during pulsed laser deposition. <i>Inorganic Materials</i> , 2017, 53, 1120-1125.	0.2	2
29	Effect of the cooling rate on the phase composition of crystallized CdGeAs <sub>2</sub> melts. <i>Russian Journal of Inorganic Chemistry</i> , 2017, 62, 1645-1651.	0.3	2
30	Magnetoresistance of the p-(InSb+MnSb)/n-InSb diode structure. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	1.5	1
31	Magnetotransport effects in granular Cd <sub>3</sub> As <sub>2</sub> + MnAs structures at high pressures. <i>Inorganic Materials</i> , 2016, 52, 357-360.	0.2	7
32	Growth of eutectic composites in the InSb-MnSb system. <i>Inorganic Materials</i> , 2016, 52, 268-273.	0.2	8
33	Phase equilibria in the ZnGeAs <sub>2</sub> -MnAs system. <i>Russian Journal of Inorganic Chemistry</i> , 2016, 61, 103-108.	0.3	2
34	Growth and physicochemical properties of Zn <sub>3</sub> As <sub>2</sub> + MnAs magnetic composite films. <i>Inorganic Materials</i> , 2015, 51, 754-758.	0.2	1
35	Resistivity and bulk compressibility of manganese-doped ZnGeAs <sub>2</sub> at hydrostatic pressures of up to 9 GPa. <i>Inorganic Materials</i> , 2015, 51, 299-301.	0.2	0
36	Manufacture of magnetic granular structures in semiconductor-ferromagnet systems. <i>Russian Journal of Inorganic Chemistry</i> , 2015, 60, 295-300.	0.3	45

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37	Phase equilibria in the ZnGeAs <sub>2</sub> -CdGeAs <sub>2</sub> system. Russian Journal of Inorganic Chemistry, 2014, 59, 126-129.	0.3	1
38	Hall effect in a magnetogranulated structure of a semiconductor-ferromagnetic system at high pressures. Inorganic Materials, 2014, 50, 647-650.	0.2	0
39	Growth of magnetic eutectic GaSb-MnSb films by pulsed laser deposition. Inorganic Materials, 2014, 50, 897-902.	0.2	20
40	Magnetic and electrical properties of Cd <sub>3</sub> As <sub>2</sub> + MnAs composite. Russian Journal of Inorganic Chemistry, 2014, 59, 355-359.	0.3	20
41	Some aspects of the chemical bonding in antimony. Inorganic Materials, 2013, 49, 766-769.	0.2	2
42	Phase equilibria and electrical and magnetic properties of a eutectic in the GaSb-MnSb system. Russian Journal of Inorganic Chemistry, 2013, 58, 1324-1329.	0.3	7
43	Structural and magnetic properties of In <sub>1-x</sub> MnxSb: Effect of Mn complexes and MnSb nanoprecipitates. Journal of Applied Physics, 2013, 113, .	1.1	26
44	Pressure and temperature dependences in p-ZnAs <sub>2</sub> at high pressures. Russian Journal of Inorganic Chemistry, 2013, 58, 350-353.	0.3	1
45	Magnetic and electrical properties of Zn <sub>3</sub> P <sub>2</sub> + MnP materials. Inorganic Materials, 2013, 49, 545-549.	0.2	6
46	Charge and magnetization transport in Cd <sub>0.81</sub> Mn <sub>0.19</sub> GeP <sub>2</sub> dilute magnetic semiconductor under high pressures. Russian Journal of Inorganic Chemistry, 2012, 57, 987-990.	0.3	1
47	Electrical and magnetic properties of the diluted magnetic semiconductors Cd <sub>1-x</sub> Mn <sub>x</sub> GeP <sub>2</sub> and Cd <sub>1-x</sub> Mn <sub>x</sub> GeAs <sub>2</sub> at high pressures. Inorganic Materials, 2012, 48, 872-876.	0.2	3
48	Electrical properties of n-Cd <sub>1-x</sub> Co <sub>x</sub> GeAs <sub>2</sub> ( $x = 0.05\text{--}0.15$ ) at high pressures. Inorganic Materials, 2012, 48, 1070-1074.	0.2	0
49	Specifics of chemical bonding in zinc crystals. Russian Journal of Inorganic Chemistry, 2012, 57, 538-543.	0.3	0
50	Chemical bonding in cadmium. Inorganic Materials, 2011, 47, 952-956.	0.2	0
51	High-pressure volume magnetostriction in the diluted magnetic semiconductor Cd <sub>1-x</sub> Mn <sub>x</sub> GeAs <sub>2</sub> ( $x = 0.2$ ) T <sub>j</sub> ETQq1 1.0784314 rgBT / Over	0.2	0
52	Magnetic properties of oriented p-Cd <sub>0.947</sub> Mn <sub>0.053</sub> GeAs <sub>2</sub> single crystals at pressures of up to 7 GPa. Inorganic Materials, 2011, 47, 1295-1297.	0.2	0
53	Magnetic properties of dilute magnetic semiconductor Cd <sub>0.82</sub> Mn <sub>0.18</sub> GeAs <sub>2</sub> under high pressures. Russian Journal of Inorganic Chemistry, 2011, 56, 924-927.	0.3	2
54	Synthesis and magnetic properties of the InSb-MnSb eutectic. Russian Journal of Inorganic Chemistry, 2011, 56, 1951-1956.	0.3	22

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55	Physicochemical foundations of synthesis of new ferromagnets from chalcopyrites AlIBIVC 2 V. Russian Journal of Inorganic Chemistry, 2010, 55, 1762-1773.	0.3	20
56	The high-pressure-induced spin-reorientation transition in a ferromagnetic semiconductor Cd0.7Mn0.3GeAs2. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 1107-1108.	0.1	0
57	Manganese-doped CdGeAs2, ZnGeAs2 and ZnSiAs2 chalcopyrites: New materials for spintronics. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 1348-1351.	0.1	0
58	Electrical properties of p-Zn1 $\tilde{x}$ Cd $\times$ GeAs 2 $\text{Mn}^{\text{a}}$ . Inorganic Materials, 2010, 46, 449-451.	0.2	0
59	Pressure, temperature, and magnetic-field effects on the transport properties of Cd0.7Mn0.3GeAs2. Inorganic Materials, 2010, 46, 571-573.	0.2	3
60	CdSb, ZnSb, and Cd $\times$ Zn1 $\tilde{x}$ Sb low-symmetry crystals: Chemical bonding and technological aspects. Inorganic Materials, 2010, 46, 574-580.	0.2	9
61	High-pressure magnetic phase transition and galvanomagnetic effects in the high-temperature ferromagnet p-Cd0.7Mn0.3GeAs2. Inorganic Materials, 2010, 46, 919-923.	0.2	2
62	Structural defects and band-structure parameters of CdAs2, ZnAs2, Cd1 $\tilde{x}$ Zn $\times$ As2, and Zn1 $\tilde{x}$ Cd $\times$ As2 single crystals. Inorganic Materials, 2010, 46, 1001-1006.	0.2	3
63	New ferromagnetics based on manganese-alloyed chalcopyrites AlIBIVC 2 V. Inorganic Materials, 2010, 46, 1421-1436.	0.2	27
64	Pressure-induced metamagnetic transition in the Cd0.7Mn0.3GeAs2 ferromagnetic semiconductor. JETP Letters, 2010, 91, 478-480.	0.4	7
65	Growth and magnetic properties of Mn-doped ZnSiAs <sub>2</sub> /Si heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1336-1338.	0.8	3
66	Phase transformation of p-Cd1 $\tilde{x}$ Mn $\times$ GeAs2 single crystals at 5.5 GPa. Inorganic Materials, 2009, 45, 961-964.	0.2	5
67	Phase relations in the Si-ZnAs2 system in the range 45-100 mol % ZnAs2. Inorganic Materials, 2009, 45, 1321-1325.	0.2	1
68	High-pressure induced magnetoresistance in p-InAs:Mn and p-CdGeAs2:Mn. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 992-994.	0.1	1
69	Kinetic effects in n-CdAs2, p-ZnAs2, and Cd $\times$ Zn1 $\tilde{x}$ As2 solid solutions. Russian Journal of Inorganic Chemistry, 2009, 54, 121-124.	0.3	1
70	Magnetic and electric properties of manganese-doped ZnSiAs2. Russian Journal of Inorganic Chemistry, 2009, 54, 1350-1354.	0.3	11
71	Phase transformations in II-V semiconductors under high pressure. Semiconductors, 2009, 43, 701-705.	0.2	4
72	Manganese-doped ZnSiAs2 chalcopyrite: A new advanced material for spintronics. Physics of the Solid State, 2009, 51, 303-308.	0.2	18

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73	Metamagnetism near T C in Mn-substituted chalcopyrite Cd <sub>0.90</sub> Mn <sub>0.10</sub> GeAs <sub>2</sub> . <i>JETP Letters</i> , 2009, 89, 333-336.	0.4	6
74	Ferromagnetic semiconductor ZnGeAs <sub>2</sub> {Mn} with a curie point of 367 K. <i>Russian Journal of Inorganic Chemistry</i> , 2008, 53, 22-29.	0.3	14
75	Join Si-ZnAs <sub>2</sub> of the ternary system Zn-Si-As. <i>Russian Journal of Inorganic Chemistry</i> , 2008, 53, 1139-1143.	0.3	3
76	Dilute magnetic semiconductor: Magnesium-doped Zn <sub>0.9</sub> Cd <sub>0.1</sub> GeAs <sub>2</sub> . <i>Russian Journal of Inorganic Chemistry</i> , 2008, 53, 1840-1844.	0.3	4
77	New ferromagnetic material based on ZnSiAs <sub>2</sub> containing manganese. <i>Theoretical Foundations of Chemical Engineering</i> , 2008, 42, 575-578.	0.2	3
78	Optical and photoelectric properties of monoclinic Zn <sub>1-x</sub> Cd <sub>x</sub> As <sub>2</sub> crystals. <i>Inorganic Materials</i> , 2007, 43, 215-220.	0.2	2
79	Synthesis, structures, and electrophysical properties of single crystals of solid solutions CdGeAs <sub>2</sub> :Mn(x) and Cd <sub>0.964</sub> Zn <sub>0.036</sub> GeAs <sub>2</sub> :Mn(x). <i>Russian Journal of Inorganic Chemistry</i> , 2007, 52, 1769-1774.	0.3	0
80	Magnetic and electrical properties of the ZnGeAs <sub>2</sub> : Mn chalcopyrite. <i>Physics of the Solid State</i> , 2007, 49, 2121-2125.	0.2	18
81	Optical absorption in monoclinic zinc diphosphide. <i>Inorganic Materials</i> , 2006, 42, 221-225.	0.2	5
82	Phase transformations of the ferromagnetic semiconductor Cd <sub>1-x</sub> Mn <sub>x</sub> GeP <sub>2</sub> at pressures of up to 5 GPa. <i>Inorganic Materials</i> , 2006, 42, 826-829.	0.2	4
83	Edge absorption and light propagation in single crystals of Zn <sub>1-x</sub> Cd <sub>x</sub> As <sub>2</sub> solid solutions. <i>Inorganic Materials</i> , 2006, 42, 1289-1293.	0.2	2
84	Growth and structure of ZnSnAs <sub>2</sub> crystals. <i>Russian Journal of Inorganic Chemistry</i> , 2006, 51, 790-793.	0.3	4
85	Ferromagnetic material CdGeP <sub>2</sub> :Mn for spintronics. <i>Russian Journal of Inorganic Chemistry</i> , 2006, 51, 1153-1156.	0.3	7
86	Ferromagnetism of manganese-doped InSb alloys. <i>Russian Journal of Inorganic Chemistry</i> , 2006, 51, 1627-1631.	0.3	24
87	Magnetism-Related Properties of CdSb Revealed by the Zeeman <sup>121</sup> Sb NQR Spectra. <i>Hyperfine Interactions</i> , 2005, 159, 173-179.	0.2	1
88	Phase transitions of p-type ZnAs <sub>2</sub> at very high pressures. <i>Inorganic Materials</i> , 2005, 41, 95-97.	0.2	1
89	Crystal-chemical aspect of formation of CdAs <sub>2</sub> -ZnAs <sub>2</sub> solid solutions. <i>Inorganic Materials</i> , 2005, 41, 3-6.	0.2	4
90	Phase transition of the new ferromagnet Cd <sub>1-x</sub> Mn <sub>x</sub> GeAs <sub>2</sub> at high pressures (0.9?4.7 GPa). <i>Inorganic Materials</i> , 2005, 41, 7-10.	0.2	4

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91	Optical and photoelectric properties of Cd <sub>1-x</sub> Zn <sub>x</sub> As <sub>2</sub> single crystals. Inorganic Materials, 2005, 41, 212-216.	0.2	4
92	High-pressure phase transformation of oriented CdSb single crystals. Inorganic Materials, 2005, 41, 217-219.	0.2	4
93	Synthesis and Structure of Mn-Doped CdGeAs <sub>2</sub> Single Crystals. Inorganic Materials, 2005, 41, 439-442.	0.2	19
94	Crystal Growth and Electrical Properties of $\hat{\gamma}^2$ -CdP <sub>2</sub> Single Crystals. Inorganic Materials, 2005, 41, 901-905.	0.2	15
95	Crystal Growth and Structure of the Zn <sub>0.97</sub> Cd <sub>0.03</sub> As <sub>2</sub> Solid Solution. Inorganic Materials, 2005, 41, 906-910.	0.2	3
96	Structural Defects in Cd <sub>1-x</sub> Zn <sub>x</sub> As <sub>2</sub> Solid Solutions. Inorganic Materials, 2005, 41, 1039-1042.	0.2	2
97	Bridgman Growth of NiSb Single Crystals. Inorganic Materials, 2005, 41, 1162-1165.	0.2	4
98	A new high-T C ferromagnet: Manganese-doped CdGeAs <sub>2</sub> chalcopyrite. Technical Physics Letters, 2004, 30, 924-926.	0.2	15
99	Preparation and Structure of CdGeAs <sub>2</sub> Crystals. Inorganic Materials, 2004, 40, 93-95.	0.2	33
100	Title is missing!. Inorganic Materials, 2003, 39, 317-322.	0.2	3
101	Electrical Properties of Cd <sub>x</sub> Zn <sub>1-x</sub> As <sub>2</sub> Solid Solutions at Pressures of up to 9 GPa. Inorganic Materials, 2003, 39, 780-782.	0.2	0
102	Phase Relations in the Zn <sub>3</sub> As <sub>2</sub> -ZnAs <sub>2</sub> -CdAs <sub>2</sub> -Cd <sub>3</sub> As <sub>2</sub> System. Inorganic Materials, 2003, 39, 911-915.	0.2	5
103	Crystal Growth and Properties of Cd <sub>1-x</sub> Zn <sub>x</sub> As <sub>2</sub> Solid Solutions. Inorganic Materials, 2003, 39, 1024-1027.	0.2	8
104	Cadmium Antimonide: Chemical Bonding and Technology. Inorganic Materials, 2003, 39, S59-S68.	0.2	7
105	Resistivity and Hall Coefficient of Zinc Diarsenide at Hydrostatic Pressures of up to 9 GPa. Inorganic Materials, 2002, 38, 201-202.	0.2	4
106	Energy Levels of Structural Defects in ZnAs <sub>2</sub> . Inorganic Materials, 2002, 38, 325-330.	0.2	5
107	Phase Transformations in the Systems Y <sub>2</sub> BaCuO <sub>5</sub> -Ba <sub>3</sub> Cu <sub>5</sub> O <sub>8</sub> and Y <sub>2</sub> BaCuO <sub>5</sub> -BaCuO <sub>2</sub> . Inorganic Materials, 2002, 38, 597-603.	0.2	0
108	Electrical Transport and Phenomenological Model of Oxygen Nonstoichiometry in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . Inorganic Materials, 2002, 38, 694-699.	0.2	2

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109	Preparation, Structure, and Optical Properties of Thin ZnAs <sub>2</sub> Films. Inorganic Materials, 2002, 38, 781-783.	0.2	0
110	Title is missing!. Inorganic Materials, 2002, 38, 813-818.	0.2	0
111	Effect of Hydrostatic Pressure on the Transport Properties of Cadmium Diarsenide Crystals. Inorganic Materials, 2001, 37, 327-330.	0.2	34
112	Interaction between thin indium films and single-crystal ZnAs <sub>2</sub> substrates. Inorganic Materials, 2000, 36, 429-430.	0.2	0
113	Effective distribution coefficient of Te in ZnAs <sub>2</sub> . Inorganic Materials, 2000, 36, 327-329.	0.2	1
114	A series of free exciton lines in zinc diarsenide. Physics of the Solid State, 1998, 40, 808-809.	0.2	0
115	Lattice Defects in Undoped CdAs <sub>2</sub> Monocrystals. Physica Status Solidi (B): Basic Research, 1998, 210, 569-573.	0.7	1
116	Photoluminescence of single crystals of cadmium diarsenide. Journal of Applied Spectroscopy, 1998, 65, 155-159.	0.3	0
117	Raman scattering and lattice vibrations in tetragonal CdAs <sub>2</sub> crystals. Physica Status Solidi (B): Basic Research, 1996, 194, 509-515.	0.7	5
118	Magnetization of Cd <sub>3</sub> As <sub>2</sub> ~30 mol % MnAs Composite at High Pressure. Technical Physics, 0, , .	0.2	0