

# Dmitriy A Chareev

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6883674/publications.pdf>

Version: 2024-02-01

119  
papers

2,368  
citations

304743  
22  
h-index

233421  
45  
g-index

120  
all docs

120  
docs citations

120  
times ranked

2319  
citing authors

#	ARTICLE	IF	CITATIONS
1	Strong interplay between stripe spin fluctuations, nematicity and superconductivity in FeSe. <i>Nature Materials</i> , 2016, 15, 159-163.	27.5	217
2	Unusual band renormalization in the simplest iron-based superconductor $\text{FeSe}_{1-x}\text{Te}_x$ . <i>Physical Review B</i> , 2014, 89, .	15.8	158
3	Magnetic ground state of FeSe. <i>Nature Communications</i> , 2016, 7, 12182.	12.8	158
4	Anomalous correlation effects and unique phase diagram of electron-doped FeSe revealed by photoemission spectroscopy. <i>Nature Communications</i> , 2016, 7, 10840.	12.8	144
5	Single crystal growth and characterization of tetragonal $\text{FeSe}_{1-x}\text{Te}_x$ superconductors. <i>CrystEngComm</i> , 2013, 15, 1989.	2.6	141
6	Coexistence of isotropic and extended $\text{H}_{\text{c}2}$ -wave order parameters in FeSe as revealed by low-temperature specific heat. <i>Physical Review B</i> , 2011, 84, .	3.2	106
7	Temperature dependence of lower critical field $H_{\text{c}1}$ and nodeless superconductivity in FeSe. <i>Physical Review B</i> , 2013, 88, .	8.2	91
8	Superconducting properties of sulfur-doped iron selenide. <i>Physical Review B</i> , 2015, 91, .	3.2	90
9	Highly Anisotropic and Twofold Symmetric Superconducting Gap in Numinously Ordered $\text{FeSe}_{1-x}\text{Te}_x$ . <i>Physical Review Letters</i> , 2016, 117, 157003.	0.93	68
10	Quasiparticle Dynamics and Phonon Softening in FeSe Superconductors. <i>Physical Review Letters</i> , 2012, 108, 257006.	7.8	59
11	Interplay between lattice and spin states degree of freedom in the FeSe superconductor: Dynamic spin state instabilities. <i>Physical Review B</i> , 2013, 87, .	3.2	54
12	Impurity scattering effects on the superconducting properties and the tetragonal-to-orthorhombic phase transition in FeSe. <i>Physical Review B</i> , 2016, 93, .	3.2	38
13	Interplay of charge density wave and multiband superconductivity in layered quasi-two-dimensional materials: The case of $\text{FeSe}_{1-x}\text{Te}_x$ . <i>Physical Review B</i> , 2015, 92, .	2.4	36
14	Evolution of the superconducting properties in $\text{FeSe}_{1-x}\text{Te}_x$ . <i>Physical Review B</i> , 2015, 92, .	3.2	35
15	Unveiling the hidden nematicity and spin subsystem in FeSe. <i>Npj Quantum Materials</i> , 2017, 2, .	5.2	33
16	Anisotropy in the upper critical field of FeSe and $\text{FeSe}_{0.33}\text{Te}_{0.67}$ single crystals. <i>Superconductor Science and Technology</i> , 2015, 28, 045013.	3.5	29
17	Magnetic and superconducting properties of $\text{FeSe}_{1-x}\text{Te}_x$ ( $x = 0.40, 0.5$ , and $1.0$ ). <i>Low Temperature Physics</i> , 2011, 37, 83-89.	0.6	26
18	Enhanced critical current density in the pressure-induced magnetic state of the high-temperature superconductor FeSe. <i>Scientific Reports</i> , 2015, 5, 16385.	3.3	25

#	ARTICLE	IF	CITATIONS
19	Covellite CuS as a matrix for “invisible” gold: X-ray spectroscopic study of the chemical state of Cu and Au in synthetic minerals. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 191, 58-69.	3.9	25
20	Synthesis of chalcogenide and pnictide crystals in salt melts using a steady-state temperature gradient. <i>Crystallography Reports</i> , 2016, 61, 682-691.	0.6	24
21	Platinum transport in chloride-bearing fluids and melts: Insights from in situ X-ray absorption spectroscopy and thermodynamic modeling. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 254, 86-101.	3.9	24
22	General principles of the synthesis of chalcogenides and pnictides in salt melts using a steady-state temperature gradient. <i>Crystallography Reports</i> , 2016, 61, 506-511.	0.6	23
23	New superconductor $\text{Li}_{x}\text{Fe}_{1+\frac{1}{2}x}\text{Se}$ ( $x \approx 0.07$ , $T_c$ up to $44\text{ K}$ ) by an electrochemical route. <i>Scientific Reports</i> , 2016, 6, 25624.	3.3	22
24	Ultrafast dynamics and phonon softening in $\text{Fe}_{1+y}\text{Se}_{1-x}\text{Te}$ single crystals. <i>New Journal of Physics</i> , 2012, 14, 103053.	2.9	21
25	Substitution mechanisms in In-, Au-, and Cu-bearing sphalerites studied by X-ray absorption spectroscopy of synthetic compounds and natural minerals. <i>Mineralogical Magazine</i> , 2019, 83, 435-451.	1.4	21
26	Thermodynamic studies of pyrrhotite–pyrite equilibria in the Ag–Fe–S system by solid-state galvanic cell technique at $518\text{--}723\text{ K}$ and total pressure of 1atm. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 5617-5633.	3.9	20
27	Acoustic characteristics of FeSe single crystals. <i>Europhysics Letters</i> , 2013, 101, 56005.	2.0	20
28	Doubling of the critical temperature of FeSe observed in point contacts. <i>Physical Review B</i> , 2016, 93, .	3.2	19
29	Gold Transport in Hydrothermal Chloride-Bearing Fluids: Insights from in Situ X-ray Absorption Spectroscopy and ab Initio Molecular Dynamics. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 240-261.	2.7	19
30	The system Ag–Pd–Te: phase relations and mineral assemblages. <i>Mineralogical Magazine</i> , 2015, 79, 1813-1832.	1.4	18
31	Separate tuning of nematicity and spin fluctuations to unravel the origin of superconductivity in FeSe. <i>Npj Quantum Materials</i> , 2020, 5, .	5.2	18
32	Single crystal growth, transport and scanning tunneling microscopy and spectroscopy of $\text{FeSe}_{1-x}\text{S}_x$ . <i>CrystEngComm</i> , 2018, 20, 2449-2454.	2.6	17
33	Tuning the activity/stability balance of anion doped CoS Se $_{2-y}$ dichalcogenides. <i>Journal of Catalysis</i> , 2018, 366, 50-60.	6.2	17
34	Nanoporous metals from thermal decomposition of transition metal dichalcogenides. <i>Acta Materialia</i> , 2020, 184, 79-85.	7.9	17
35	Magnetic properties of superconducting FeSe in the normal state. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 046004.	1.8	16
36	Crystal growth, transport phenomena and two-gap superconductivity in the mixed alkali metal $(\text{K}_{1-z}\text{Na}_z)\text{Fe}_{2-y}\text{Se}_2$ iron selenide. <i>CrystEngComm</i> , 2014, 16, 6919-6928.	2.6	15

#	ARTICLE	IF	CITATIONS
37	Structure–Property Relationships in $\hat{1}\pm$ , $\hat{1}2\pm$ , and $\hat{1}3$ -Modifications of Mn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> . Inorganic Chemistry, 2016, 55, 10692-10700.	4.0	15
38	Highly mobile carriers in iron-based superconductors. Superconductor Science and Technology, 2017, 30, 035017.	3.5	15
39	Vortex-core properties and vortex-lattice transformation in FeSe. Physical Review B, 2019, 99, .	3.2	15
40	Evidence for the Fulde–Ferrell–Larkin–Ovchinnikov state in bulk NbS <sub>2</sub> . Nature Communications, 2021, 12, 3676.	12.8	15
41	Gossamer high-temperature bulk superconductivity in FeSe. Physical Review B, 2017, 95, .	3.2	14
42	Experimental study of sulfur dioxide interaction with silicates and aluminosilicates at temperatures of 650 and 850°C. Geochemistry International, 2010, 48, 1039-1046.	0.7	13
43	The effects of 10 to >160 GPa shock on the magnetic properties of basalt and diabase. Geochemistry, Geophysics, Geosystems, 2016, 17, 4753-4771.	2.5	13
44	Extended Magnetic Dome Induced by Low Pressures in Superconducting $\text{FeSe}_{1-x}\text{Te}_x$ ( $x=0.1, 0.2, 0.28, 0.4$ and $0.45$ ). Physical Review Letters, 2019, 123, 147001.	1.1	10
45	Iron and Sulfur Isotope Factors of Pyrite: Data from Experimental Mössbauer Spectroscopy and Heat Capacity. Geochemistry International, 2019, 57, 369-383.	0.7	13
46	The State of Platinum in Pyrite Studied by X-Ray Absorption Spectroscopy of Synthetic Crystals. Economic Geology, 2019, 114, 1649-1663.	3.8	13
47	“Invisible” Gold in Synthetic and Natural Arsenopyrite Crystals, Vorontsovka Deposit, Northern Urals. Geology of Ore Deposits, 2019, 61, 447-468.	0.7	13
48	Coexistence of superconductivity and magnetism in $\text{Fe}_{1+\delta}\text{Te}_{1-\delta}\text{Sex}$ ( $x=0.1, 0.2, 0.28, 0.4$ and $0.45$ ). Physica C: Superconductivity and Its Applications, 2013, 489, 32-35.	1.2	12
49	“Invisible” gold in covellite (CuS): Synthesis and studies by EPMA, LA-ICP-MS, and XPS techniques. Doklady Earth Sciences, 2014, 459, 1381-1386.	0.7	11
50	THE Ag-Pd-Se SYSTEM: PHASE RELATIONS INVOLVING MINERALS AND POTENTIAL NEW MINERALS. Canadian Mineralogist, 2014, 52, 77-89.	1.0	11
51	Magnetic characterization of non-ideal single-domain monoclinic pyrrhotite and its demagnetization under hydrostatic pressure up to 2 GPa with implications for impact demagnetization. Physics of the Earth and Planetary Interiors, 2016, 257, 79-90.	1.9	11
52	Unusual two-dimensional behavior of iron-based superconductors with low anisotropy. Physical Review B, 2017, 96, .	3.2	11
53	Superconducting gaps in FeSe studied by soft point-contact Andreev reflection spectroscopy. Physical Review B, 2017, 96, .	3.2	11
54	The State of Trace Elements (In, Cu, Ag) in Sphalerite Studied by X-Ray Absorption Spectroscopy of Synthetic Minerals. Minerals (Basel, Switzerland), 2020, 10, 640.	2.0	11

#	ARTICLE	IF	CITATIONS
55	Growth of Transition-Metal Dichalcogenides by Solvent Evaporation Technique. Crystal Growth and Design, 2020, 20, 6930-6938.	3.0	11
56	Magnetic properties of novel FeSe(Te) superconductors. Journal of Magnetism and Magnetic Materials, 2012, 324, 3460-3463.	2.3	10
57	Valence-bond solid as the quantum ground state in honeycomb layered urusovite $\text{CuAl}_3\text{As}_2$ . Physical Review B, 2015, 91, .	3.2	10
58	X-ray spectroscopy study of the chemical state of invisible Au in synthetic minerals in the Fe-As-S system. American Mineralogist, 2017, 102, .	1.9	10
59	Specific heat of FeSe: Two gaps with different anisotropy in superconducting state. Physica B: Condensed Matter, 2018, 536, 785-789.	2.7	10
60	Crystal and electronic structure study of AgPd3Se. Journal of Solid State Chemistry, 2011, 184, 2794-2798.	2.9	9
61	Thermodynamic study of monoclinic pyrrhotite in equilibrium with pyrite in the Ag-Fe-S system by solid-state electrochemical cell technique. American Mineralogist, 2014, 99, 2031-2034.	1.9	9
62	Anisotropic effect of appearing superconductivity on the electron transport in FeSe. JETP Letters, 2017, 105, 786-791.	1.4	9
63	Superconducting Properties of FeSe $1-x$ Crystals for $x$ up to 0.19. Journal of Low Temperature Physics, 2016, 185, 467-473.	1.4	8
64	Single-crystal Fe-bearing sphalerite: synthesis, lattice parameter, thermal expansion coefficient and microhardness. Physics and Chemistry of Minerals, 2017, 44, 287-296.	0.8	8
65	Spin-Order-Induced Ferroelectricity and Magnetoelectric Effect in $\text{Li}_{1-x}\text{Cu}_{2x}\text{Fe}_{2(1-x)}\text{VO}_{4(1-x)}$ . Tj ETQ, 2018, 10, .	0.8	8
66	Observation of orbital ordering and origin of the nematic order in FeSe. New Journal of Physics, 2019, 21, 103033.	2.9	8
67	Piezomagnetism of FeSe single crystals. Europhysics Letters, 2013, 103, 47009.	2.0	7
68	Interrelation of superconductivity and magnetism in $\text{FeSe}_{1-x}\text{Tex}$ compounds. Pressure effects. Low Temperature Physics, 2014, 40, 615-620.	0.6	7
69	Determination of the lower critical field $H_1(T)$ in FeSe single crystals by magnetization measurements. Physica C: Superconductivity and Its Applications, 2014, 503, 143-145.	1.2	7
70	Kravtsovite, $\text{PdAg}_2\text{S}$ , a new mineral from the Noril'sk-Talnakh deposit, Krasnoyarskiy kray, Russia. European Journal of Mineralogy, 2017, 29, 597-602.	1.3	7
71	Measurements of the superconducting anisotropy in FeSe with a resonance frequency technique. AIP Advances, 2019, 9, .	1.3	7
72	The Charge State of Pt in Binary Compounds and Synthetic Minerals Determined by X-ray Absorption Spectroscopy and Quantum Chemical Calculations. Minerals (Basel, Switzerland), 2021, 11, 79.	2.0	7

#	ARTICLE	IF	CITATIONS
73	Application of solid electrolytes $\text{Ag}-\text{AgI}$ and $\text{RbAg}_4\text{I}_5$ for refining phase diagrams and determining standard thermodynamic functions of compounds in silver-containing systems. Russian Journal of Electrochemistry, 2007, 43, 694-698.	0.9	6
74	The low temperature electrochemical growth of iron, nickel and other metallic single crystals from halide eutectic fluxes in a temperature gradient. Journal of Crystal Growth, 2015, 429, 63-67.	1.5	6
75	Pressure dependence of upper critical fields in $\text{FeSe}$ single crystals. Superconductor Science and Technology, 2016, 29, 035007.	3.5	6
76	Structural Phase Transitions and the Equation of State in $\text{SnSe}$ at High Pressures up to 2 Mbar. JETP Letters, 2018, 108, 414-418.	1.4	6
77	Nipalarsite, $\text{Ni}_8\text{Pd}_3\text{As}_4$ , a new platinum-group mineral from the Monchétundra Intrusion, Kola Peninsula, Russia. Mineralogical Magazine, 2019, 83, 837-845.	1.4	6
78	The state of platinum in pyrrhotite: X-ray absorption spectroscopy study and implications for the role of Fe sulfides as platinum carriers. Mineralogical Magazine, 2021, 85, 846-861.	1.4	6
79	Analysis of nonlinear conductivity of point contacts on the base of $\text{FeSe}$ in the normal and superconducting state. Low Temperature Physics, 2016, 42, 31-35.	0.6	5
80	Direct evidence of two superconducting gaps in $\text{FeSe}_{0.5}\text{Te}_{0.5}$ : SnS-Andreev spectroscopy and the lower critical field. JETP Letters, 2016, 104, 852-858.	1.4	5
81	Tuning of physical properties of $\text{Fe}_7(\text{PO}_4)_6$ by sodium intercalation. Journal of Alloys and Compounds, 2018, 744, 600-605.	5.5	5
82	Thermodynamic Functions of $\text{PtS}_2$ in a Wide Temperature Range. Inorganic Materials, 2020, 56, 116-125.	0.8	5
83	Synthesis and crystal structure of $(\text{Ag},\text{Pd})_{22}\text{Se}_{6}$ . Powder Diffraction, 2013, 28, 13-17.	0.2	4
84	The long-range magnetic order and underlying spin model in shattuckite $\text{Cu}_5(\text{SiO}_3)_4(\text{OH})_2$ . Physics and Chemistry of Minerals, 2016, 43, 43-49.	0.8	4
85	Majority carrier type inversion in the $\text{FeSe}$ family and a “doped semimetal” scheme in iron-based superconductors. Superconductor Science and Technology, 2019, 32, 065005.	3.5	4
86	Crystal structure and transport properties of $\text{CuPdBiS}_3$ . Journal of Alloys and Compounds, 2019, 792, 983-987.	5.5	4
87	Mössbauer Spectroscopy Study of $\text{FeSe}_{0.91}\text{S}_{0.09}$ Superconductor Single Crystals. JETP Letters, 2019, 110, 562-567.	1.4	4
88	The solubility of cooperite $\text{PtS}(\text{cr})$ at 25–450°C, $P_{\text{sat}}$ ~1000 bar and hydrosulfide complexing of platinum in hydrothermal fluids. Chemical Geology, 2021, 559, 119968.	3.3	4
89	Evolution of vortex matter, phase diagram, and upper critical field in the $\text{FeSe}_{1-x}\text{S}_x$ system. Superconductor Science and Technology, 2021, 34, 035019.	3.5	4
90	Single-crystal structure study of iron chalcogenides $\text{Fe}_1 + \text{Te}_1 \sim x \text{ S}_x$ . Crystallography Reports, 2015, 60, 227-235.	0.6	3

#	ARTICLE	IF	CITATIONS
91	Pressure effect on magnetic susceptibility of SmS in the “black” phase. <i>Journal of Alloys and Compounds</i> , 2017, 695, 1647-1652.	5.5	3
92	Structural phase transitions and the equation of state of SnTe at high pressures up to 2 mbar. <i>JETP Letters</i> , 2017, 106, 662-666.	1.4	3
93	Heat Capacity and Thermodynamic Functions of PdS. <i>Inorganic Materials</i> , 2020, 56, 683-689.	0.8	3
94	Temperature dependence of tellurium fugacity for the kotulskite (PdTe)–merenskyite (PdTe <sub>2</sub> ) equilibrium determined by the method of a solid-state galvanic cell. <i>Physics and Chemistry of Minerals</i> , 2021, 48, 1.	0.8	3
95	Quasiparticle Dynamics in FeSe Superconductors Studied by Femtosecond Spectroscopy. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 1213-1215.	1.8	2
96	Anisotropy of magnetic properties of Fe <sub>1+y</sub> Te. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 436003.	1.8	2
97	Local features of the crystal structure of superconducting iron chalcogenides Fe(TeSe) <sub>1-x</sub> . <i>Physics of the Solid State</i> , 2016, 58, 447-453.	0.6	2
98	Anisotropic Superconducting Gaps and Boson Mode in FeSe <sub>1-x</sub> S <sub>x</sub> Single Crystals. <i>Journal of Superconductivity and Novel Magnetism</i> , 2017, 30, 763-768.	1.8	2
99	Magnetotransport properties of FeSe in fields up to 50 T. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 459, 221-225.	2.3	2
100	Short-Range and Long-Range Order in AFM–FM Exchange Coupled Compound LiCu <sub>2</sub> (VO <sub>4</sub> )(OH) <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2019, 123, 17933-17942.	3.1	2
101	Thermodynamic Properties of AuSb <sub>2</sub> . <i>Inorganic Materials</i> , 2020, 56, 1229-1233.	0.8	2
102	Parameters of native silver formation in the Ag-Fe-S system based on the EMF determination at 518–728 K and 1–5000 bar total pressure. <i>Doklady Earth Sciences</i> , 2006, 411, 1233-1236.	0.7	1
103	Study of the itinerant electron magnetism of Fe-based superconductors by the proximity effect. <i>Physica C: Superconductivity and Its Applications</i> , 2013, 495, 153-159.	1.2	1
104	Spin-dependent conductivity of iron-based superconductors in a magnetic field. <i>Physica B: Condensed Matter</i> , 2015, 464, 68-73.	2.7	1
105	Experimental Aspects of Platinum-Group Minerals. , 2018, , 303-354.		1
106	The Synthesis of Crystals of Chalcogenides of K, Zr, Hf, Hg, and Some Other Elements in Halide Melts under Conditions of Stationary Temperature Gradient. <i>Crystallography Reports</i> , 2019, 64, 996-1002.	0.6	1
107	Crystal structure and phase transitions at high pressures in the superconductor FeSe <sub>0.89</sub> S <sub>0.11</sub> . <i>Journal of Alloys and Compounds</i> , 2021, 860, 158419.	5.5	1
108	Phase separation near the charge neutrality point in FeSe <sub>1-x</sub> Tex crystals with x < 0.15. <i>Superconductor Science and Technology</i> , 0, , .	3.5	1

#	ARTICLE	IF	CITATIONS
109	Experimental Methods of Synthesis of Nano-/Macro Mineral Materials. Advanced Materials Research, 2013, 650, 308-313.	0.3	0
110	Features of the electronic structure of FeTe compounds. Low Temperature Physics, 2015, 41, 990-995.	0.6	0
111	C-axis Resistivity of Superconductive FeSe Single Crystals: Upper Critical Field and its Angular Behavior. Physics Procedia, 2015, 75, 364-368.	1.2	0
112	Publisher's Note: «Features of the electron structure of FeTe compounds»[Low Temp. Phys. 41, 990 (2015)]. Low Temperature Physics, 2016, 42, 162-162.	0.6	0
113	Short-Lived Electron Excitations in FeTe <sub>1-x</sub> Se <sub>x</sub> as Revealed by Microwave Absorption. Journal of Experimental and Theoretical Physics, 2019, 129, 81-85.	0.9	0
114	The Se <sub>2</sub> (Gas) Fugacity in Systems with Noble Metals: Chrsitanleyite Ag <sub>2</sub> Pd <sub>3</sub> Se <sub>4</sub> «Naumannite Ag <sub>2</sub> Se» <sup>2</sup> -PdSe <sub>2</sub> and Luberoite Pt <sub>5</sub> Se <sub>4</sub> «Sudovikovite PtSe <sub>2</sub> . Doklady Earth Sciences, 2019, 485, 439-443.	0.7	0
115	The system Pd-Ag-S: phase relations and mineral assemblages. Mineralogical Magazine, 2020, 84, 125-130.	1.4	0
116	Experimental Study of Interaction Between Sulphurous Anhydride and Silicates by the Example of Albite and Diopside. , 2008, , .		0
117	Fluctuations of various order parameters in cuprate and Fe-based superconductors as revealed by microwave absorption measurements. Magnetic Resonance in Solids, 2019, 21, .	0.2	0
118	Multiband effect in elastoresistance of Fe(Se,Te). Europhysics Letters, 2020, 131, 57001.	2.0	0
119	Temporal Spinodal Decomposition of the Fe <sub>1+y</sub> Te <sub>1-x</sub> Se <sub>x</sub> Crystals and its Impact on Superconducting Properties. Physica Status Solidi (B): Basic Research, 0, , .	1.5	0