

# Superconductivity in Intercalated Molybdenum Disulfide

Physical Review Letters

27, 402-404

DOI: 10.1103/physrevlett.27.402

Citation Report

#	ARTICLE	IF	CITATIONS
1	Comparison between ferromagnetism and superconductivity of intercalation compounds. Physics Letters, Section A: General, Atomic and Solid State Physics, 1971, 37, 249-250.	2.1	6
2	High-Temperature Superconductors, the First Ternary System. Science, 1972, 175, 1465-1466.	12.6	221
3	Photoemission Studies of the Layered Dichalcogenides NbSe <sub>2</sub> and MoS <sub>2</sub> and a Modification of the Current Band Models. Physical Review Letters, 1972, 29, 1501-1504.	7.8	90
4	Superconductivity of Double Chalcogenides: Li <sub>x</sub> Ti <sub>1.1</sub> S <sub>2</sub> . Science, 1972, 175, 884-885.	12.6	58
5	Electrical resistivity of intercalated molybdenum disulfide. Solid State Communications, 1973, 13, 1065-1068.	1.9	52
6	Ferromagnetism in Eu intercalated NbS <sub>2</sub> . Materials Research Bulletin, 1973, 8, 1231-1239.	5.2	18
7	Electronic properties of two dimensional solids: The layer type transition metal dichalcogenides. , 1973, , 1-29.		13
8	Alkali metal intercalates of molybdenum disulfide. Journal of Chemical Physics, 1973, 58, 697-701.	3.0	202
9	Band Structure of MoS <sub>2</sub> and NbS <sub>2</sub> . Physical Review Letters, 1973, 30, 1175-1178.	7.8	165
10	Positive Curvature of theHc <sub>2</sub> -versus-T <sub>c</sub> Boundaries in Layered Superconductors. Physical Review Letters, 1974, 32, 712-714.	7.8	108
11	Hydrostatic Pressure Effect on the Superconducting Transition Temperature and the Transport Properties of NbSe <sub>2</sub> . Journal of the Physical Society of Japan, 1974, 37, 36-49.	1.6	8
12	Superconductivity in alkaline earth metal and Yb intercalated group VI layered dichalcogenides. Journal of Solid State Chemistry, 1974, 9, 323-329.	2.9	50
13	The alkaline earth intercalates of molybdenum disulfide. Journal of Chemical Physics, 1975, 62, 1068-1073.	3.0	54
14	Superconducting critical fields of alkali and alkaline-earth intercalates of MoS <sub>2</sub> . Physical Review B, 1976, 13, 3843-3853.	3.2	103
15	Preparation and x-ray study of mixed-anion tungsten dichalcogenides. Inorganic Chemistry, 1976, 15, 2198-2202.	4.0	36
16	Structural and Magnetic Properties of Layered Chalcogenides of the Transition Elements. , 1976, , 423-457.		13
17	Transition metal sulfides. Progress in Solid State Chemistry, 1976, 10, 207-270.	7.2	226
18	Band Structure Changes in Interealates of Niobium Diselenide. Physica Status Solidi (B): Basic Research, 1976, 76, 599-604.	1.5	9

#	ARTICLE		IF	CITATIONS
19	High pressure investigations of MoS <sub>2</sub> . Journal of Physics and Chemistry of Solids, 1976, 37, 329-335.		4.0	39
20	Inclusion Compounds. , 1976, , 89-166.			27
21	Growth and the Crystal Characteristics of Dichalcogenides Having Layer Structures. , 1976, , 1-50.			9
22	Physics and chemistry of MoS <sub>2</sub> intercalation compounds. Materials Science and Engineering, 1977, 31, 289-295.		0.1	53
23	Alkali metal intercalates of tantalum disulfide. Journal of Physics and Chemistry of Solids, 1978, 39, 191-192.		4.0	8
24	Adsorption of Cs and O <sub>2</sub> on MoS <sub>2</sub> . Surface Science, 1978, 75, 17-28.		1.9	47
25	Intercalation-induced shift of the absorption edge in ZrS <sub>2</sub> and HfS <sub>2</sub> . Journal of Physics C: Solid State Physics, 1979, 12, 2189-2196.		1.5	25
26	EXAFS in niobium diselenide intercalated with rubidium. Journal of Physics C: Solid State Physics, 1979, 12, 3889-3897.		1.5	13
27	Intercalation in Layered Transition Metal Dichalcogenides. , 1979, , 99-199.			23
28	Alkali Metal Intercalation Compounds of Transition Metal Chalcogenides: TX <sub>2</sub> , TX <sub>3</sub> and TX <sub>4</sub> Chalcogenides. , 1979, , 201-250.			48
29	The First Row Transition Metal Intercalation Complexes of Some Metallic Group VA Transition Metal Dichalcogenides. , 1979, , 251-305.			8
30	Intercalation Compounds of Molybdenum Disulfide. , 1979, , 307-319.			14
31	Some physical properties of multicomponent molybdenum chalcogenides. Cryogenics, 1980, 20, 257-265.		1.7	11
32	Intercalation reaction of layered transition metal disulfidesâ”ll. Journal of Physics and Chemistry of Solids, 1980, 41, 525-529.		4.0	9
33	Transition Metal Dichalcogenides and Their Intercalates. International Reviews in Physical Chemistry, 1983, 3, 177-216.		2.3	97
34	Anomalies in the properties of Hf(S <sub>2</sub> â”xTex) <sub>1-y</sub> and Hf(Se <sub>2</sub> â”xTex) <sub>1-y</sub> near the metal-insulator transition. Journal of Solid State Chemistry, 1984, 54, 438-446.		2.9	31
35	The interaction of Cs and O <sub>2</sub> on the basal plane of MoS <sub>2</sub> . Surface Science, 1985, 164, 290-304.		1.9	21
36	Adsorption properties of Fe on MoS <sub>2</sub> . Surface Science, 1985, 160, 451-466.		1.9	36

#	ARTICLE	IF	CITATIONS
37	Intercalation of MoS <sub>2</sub> (0001) with Fe, Ni and Pd. Solid State Communications, 1987, 61, 567-569.	1.9	19
38	Electronic properties of intercalation complexes of the transition metal dichalcogenides. Advances in Physics, 1987, 36, 1-94.	14.4	700
39	Electrically driven metal-insulator transition in layered transition-metal dichalcogenides. Physical Review B, 1988, 38, 3056-3059.	3.2	8
40	SIMS study of Cs/MoS <sub>2</sub> (0001). Surface Science, 1989, 219, 261-276.	1.9	22
41	Single-crystal conductivity study of the tin dichalcogenides SnS <sub>2</sub> $\times$ Sex intercalated with cobaltocene. Journal of Materials Chemistry, 1991, 1, 51-57.	6.7	16
42	Preparation and characterization of layered superconductors. Physical Review B, 1991, 43, 5276-5279.	3.2	23
43	Structure, dynamics, and electronic properties of cobaltocene in SnS <sub>2</sub> $\times$ Sex{0.5 $\times$ 0.5}. Chemical Society Reviews, 1992, 21, 121-126.	38.1	22
44	Physical Properties of Nanocrystalline MoS <sub>2</sub> and WS <sub>2</sub> Particles Produced by CO <sub>2</sub> Laser Pyrolysis. Materials Research Society Symposia Proceedings, 1993, 327, 47.	0.1	1
45	Folding CuO <sub>2</sub> planes into fullerene-like clusters. Physica C: Superconductivity and Its Applications, 1994, 235-240, 991-992.	1.2	0
46	Carbosulfide superconductor. Solid State Communications, 1999, 112, 323-327.	1.9	57
47	Synthesis of MoSe <sub>2</sub> nanocrystallites by a solvothermal conversion from MoO <sub>3</sub> . Materials Research Bulletin, 1999, 34, 497-501.	5.2	35
48	Angle-Resolved X-ray Photoelectron Spectroscopy of in Situ Deposited Li on MoS <sub>2</sub> (0002). Journal of Physical Chemistry B, 2000, 104, 3145-3154.	2.6	10
49	Transport and optical property measurements in indium intercalated molybdenum diselenide single crystals grown by DVT technique. Synthetic Metals, 2001, 123, 73-81.	3.9	6
50	Intercalation of a pendant-arm tetraazamacrocyclic into molybdenum disulfide. Chemical Communications, 2001, , 1598-1599.	4.1	23
51	One-Electron States in a Layered Crystal with Covalent Bridges. Physica Status Solidi (B): Basic Research, 2002, 229, 1371-1396.	1.5	2
52	Intercalation of tetraazamacrocycles into molybdenum disulfide. Journal of Materials Chemistry, 2003, 13, 44-49.	6.7	29
53	Electrodeposition of Mo-Se thin films from a sulfamic electrolyte. Journal of Solid State Electrochemistry, 2004, 8, 330-336.	2.5	17
54	Sharp switching of the magnetization in Fe <sub>1</sub> $\cdot$ 4TaS <sub>2</sub> . Physical Review B, 2007, 75, .	3.2	99

#	ARTICLE	IF	CITATIONS
55	Characterization of MoSe <sub>2</sub> thin film deposited at room temperature from solution phase. <i>Journal of Crystal Growth</i> , 2008, 311, 15-19.	1.5	33
56	Characterization of low dimensional molybdenum sulfide nanostructures. <i>Materials Characterization</i> , 2008, 59, 204-212.	4.4	21
57	Synthesis of MoSe <sub>2</sub> nano-flakes modified with dithiophosphinic acid extractant at low temperature. <i>Materials Letters</i> , 2008, 62, 3649-3651.	2.6	24
58	Suppression and emergence of charge-density waves at the surfaces of layered 1T-TiSe <sub>2</sub> and 1T-TaS <sub>2</sub> by in situ Rb deposition. <i>New Journal of Physics</i> , 2010, 12, 125018.	2.9	45
59	Observation of superconductivity at 30 K in A <sub>x</sub> Fe <sub>2</sub> Se <sub>2</sub> (A = Li, Na, Ba, Sr, Ca, Yb and Eu). <i>Scientific Reports</i> , 2012, 2, 426.	3.3	282
60	First-Principles Characterization of Potassium Intercalation in Hexagonal 2H-MoS <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2012, 116, 1826-1832.	3.1	50
61	Exploring FeSe-based superconductors by liquid ammonia method. <i>Chinese Physics B</i> , 2013, 22, 087412.	1.4	14
62	Facile synthesis of few-layer-thick carbon nitride nanosheets by liquid ammonia-assisted lithiation method and their photocatalytic redox properties. <i>RSC Advances</i> , 2014, 4, 32690-32697.	3.6	63
63	Storylines in intercalation chemistry. <i>Dalton Transactions</i> , 2014, 43, 10276-10291.	3.3	85
64	Pressure-Induced Metallization of Molybdenum Disulfide. <i>Physical Review Letters</i> , 2014, 113, 036802.	7.8	239
65	Metallic Binary Copper Chalcogenides with Orthorhombic Layered Structure. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1726, 37.	0.1	1
66	Synthesis and properties of molybdenum disulphide: from bulk to atomic layers. <i>RSC Advances</i> , 2015, 5, 7495-7514.	3.6	288
67	Pristine and intercalated transition metal dichalcogenide superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2015, 514, 86-94.	1.2	103
68	Electronic transport properties of transition metal dichalcogenide field-effect devices: surface and interface effects. <i>Chemical Society Reviews</i> , 2015, 44, 7715-7736.	38.1	353
69	Enhancing the superconducting transition temperature of thin-layer MoS <sub>2</sub> via increasing activation volume. <i>Journal of Alloys and Compounds</i> , 2016, 688, 921-924.	5.5	2
70	Dynamical stability and superconductivity of Li-intercalated bilayer MoS <sub>2</sub> : A first-principles prediction. <i>Physical Review B</i> , 2016, 93, .	3.2	34
71	Chemical bond in Fe <sub>x</sub> TiSe <sub>2</sub> intercalation compounds: dramatic influence of Fe concentration. <i>RSC Advances</i> , 2016, 6, 106527-106539.	3.6	18
72	Interlayer Coupling Affected Structural Stability in Ultrathin MoS <sub>2</sub> : An Investigation by High Pressure Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24992-24998.	3.1	29

#	ARTICLE	IF	CITATIONS
73	Facile synthesis, structure and physical properties of 3R-A <sub>x</sub> NbS <sub>2</sub> (A=Li, Na). Journal of Alloys and Compounds, 2016, 663, 225-229.	5.5	7
74	Superconductivity in Potassium-Doped Metallic Polymorphs of MoS <sub>2</sub> . Nano Letters, 2016, 16, 629-636.	9.1	129
75	Surface functionalization of WSe <sub>2</sub> by F <sub>16</sub> CoPc. Physica Status Solidi (B): Basic Research, 2017, 254, 1600656.	1.5	2
76	Hydrogen intercalation of compounds with FeSe and MoS <sub>2</sub> layered crystal structures. Inorganic Materials: Applied Research, 2017, 8, 759-762.	0.5	8
77	Observation of superconductivity in 1T-MoS <sub>2</sub> nanosheets. Journal of Materials Chemistry C, 2017, 5, 10855-10860.	5.5	77
78	Metastable MoS <sub>2</sub> : Crystal Structure, Electronic Band Structure, Synthetic Approach and Intriguing Physical Properties. Chemistry - A European Journal, 2018, 24, 15942-15954.	3.3	133
79	Superconductivity in Pristine <math>\text{H}_{x}\text{MoS}_2</math> at Ultrahigh Pressure. Physical Review Letters, 2018, 120, 037002.		
80	Solids, liquids, and gases under high pressure. Reviews of Modern Physics, 2018, 90, .	45.6	337
81	Synthesis, crystal structure and superconducting properties of calcium intercalates of MoS <sub>2</sub> . Journal of Solid State Chemistry, 2018, 258, 131-137.	2.9	3
82	Structure Re-determination and Superconductivity Observation of Bulk 1T MoS <sub>2</sub> . Angewandte Chemie, 2018, 130, 1246-1249.	2.0	46
83	Structure Re-determination and Superconductivity Observation of Bulk 1T MoS <sub>2</sub> . Angewandte Chemie - International Edition, 2018, 57, 1232-1235.	13.8	126
84	Quasimolecular complexes in the Cu <sub>x</sub> TiSe <sub>y</sub> S <sub>y</sub> intercalation compound. Journal of Materials Chemistry C, 2018, 6, 12592-12600.	5.5	3
85	Superconductivity in Potassium-Intercalated Ti <sub>x</sub> ZrTe <sub>y</sub> -WTe <sub>2</sub> . Nano Letters, 2018, 18, 6585-6590.	9.1	52
86	Pressure-induced phase transition, metallization and superconductivity in ZrS <sub>2</sub> . Physical Chemistry Chemical Physics, 2018, 20, 23656-23663.	2.8	23
87	Charged Carbon Nanomaterials: Redox Chemistries of Fullerenes, Carbon Nanotubes, and Graphenes. Chemical Reviews, 2018, 118, 7363-7408.	47.7	182
88	Thermal stability of the layered modification of Cu <sub>0.5</sub> ZrTe <sub>2</sub> in the temperature range 25-900°C. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 1020-1025.	0.5	11
89	Electrical and anisotropic magnetic properties in layered Mn <sub>1/3</sub> TaS <sub>2</sub> crystals. Applied Physics Letters, 2018, 113, .	3.3	19
90	Electron-phonon coupling in a honeycomb borophene grown on Al(111) surface. Physical Review B, 2019, 100, .	3.2	22

#	ARTICLE	IF	CITATIONS
91	Synthesis, crystal structures and physical properties of A(H <sub>2</sub> O) MoS <sub>2</sub> (A=K, Rb, Cs). Journal of Solid State Chemistry, 2019, 279, 120937.	2.9	5
92	In Situ Study of K <sup>+</sup> Electrochemical Intercalating into MoS <sub>2</sub> Flakes. Journal of Physical Chemistry C, 2019, 123, 5067-5072.	3.1	26
93	Effects of Rb Intercalation on NbSe <sub>2</sub> : Phase Formation, Structure, and Physical Properties. Inorganic Chemistry, 2019, 58, 7564-7570.	4.0	9
94	Intercalation of Layered Materials from Bulk to 2D. Advanced Materials, 2019, 31, e1808213.	21.0	120
95	An overview of the recent advances in inorganic nanotubes. Nanoscale, 2019, 11, 8073-8090.	5.6	55
96	Intercalation behaviour of Li and Na into 3-layer and multilayer MoS <sub>2</sub> flakes. Electrochimica Acta, 2020, 331, 135284.	5.2	26
97	Nanoscale Measurements of Elastic Properties and Hydrostatic Pressure in H <sub>2</sub> -Bulged MoS <sub>2</sub> Membranes. Advanced Materials Interfaces, 2020, 7, 2001024.	3.7	26
98	Direct synthesis of metastable phases of 2D transition metal dichalcogenides. Chemical Society Reviews, 2020, 49, 3952-3980.	38.1	142
99	Proximity-Induced Superconductivity in Monolayer MoS <sub>2</sub> . ACS Nano, 2020, 14, 2718-2728.	14.6	40
100	Disorder-driven two-dimensional quantum phase transitions in Li <sub>x</sub> MoS <sub>2</sub> . 2D Materials, 2020, 7, 035013.	4.4	7
101	Investigation of potassium-intercalated bulk $\text{MoS}_2$ transmission electron energy-loss spectroscopy. Physical Review B, 2020, 101, .		
102	A(NH <sub>3</sub> ) <sub>x</sub> FePS <sub>3</sub> (A = Li, K): intercalated Fe thiophosphate via the liquid ammonia method. Materials Chemistry Frontiers, 2021, 5, 2715-2723.	5.9	3
103	Intercalation as a versatile tool for fabrication, property tuning, and phase transitions in 2D materials. Npj 2D Materials and Applications, 2021, 5, .	7.9	113
104	Clarification of the ordering of intercalated Fe atoms in Fe <sub>x</sub> TiS <sub>2</sub> and its effect on the magnetic properties. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 441-448.	1.1	4
105	The crystal structure, chemical bonding, and magnetic properties of the intercalation compounds Cr <sub>x</sub> ZrTe <sub>2</sub> ( $x \approx 0.3$ ). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 270, 115218.	3.5	1
106	Studying the heterogeneity of the Cr <sub>x</sub> Ti <sub>1-x</sub> Ch <sub>2</sub> (Ch = S, Se) single crystals using X-ray scanning photoemission microscopy. Journal of Physics and Chemistry of Solids, 2022, 160, 110309.	4.0	3
107	Insertion Cathodes for Solid State Microbatteries. NATO ASI Series Series B: Physics, 1990, , 269-292.	0.2	2
108	On Superconducting Metal-Ammonia Complexes. , 1973, , 341-353.		3

#	ARTICLE	IF	CITATIONS
109	Crystal and Electronic Structure of Cobaltocene Intercalates of the Host Lattices SnS <sub>2-x</sub> Se <sub>x</sub> (x=0, 0.3,) Tj ETQq0 0 0 rgBT /Overlock 10 T		
110	Electronic Properties of Two Dimensional Solids: The Layer Type Transition Metal Dichalcogenides., 1973, , 1-29.	6	
111	Specific features of the electronic and crystal structure of Cu <sub>x</sub> ZrSe <sub>2</sub> (0 < x < 0.5) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.5	7
112	Structures and Properties of Superconducting Materials. Treatise on Materials Science and Technology, 1973, 2, 231-278.	0.1	0
113	Intercalation in two-dimensional transition metal chalcogenides: interlayer engineering and applications. Progress in Energy, 2022, 4, 022001.	10.9	2
114	First principles study of the superconductivity in Os-S system. Applied Physics Express, 0, , .	2.4	0
115	An unusual Cu/Te hybridization in the Cu <sub>0.3</sub> ZrTe <sub>2</sub> intercalation compound. Journal of Alloys and Compounds, 2022, 924, 166580.	5.5	1
116	Recent advances in quasi-2D superconductors via organic molecule intercalation. Chinese Physics B, 2022, 31, 107403.	1.4	1
117	Superconducting properties of doped blue phosphorene: effects of non-adiabatic approach. 2D Materials, 2022, 9, 045029.	4.4	6
118	Prediction of ferroelectric superconductors with reversible superconducting diode effect. Physical Review B, 2022, 106, .	3.2	15
119	Energetic and Kinetic Coupling between the Intercalated Atom and Intrinsic S Vacancy in the MoS <sub>2</sub> Bilayer. Journal of Physical Chemistry C, 2022, 126, 18560-18570.	3.1	1
120	Pressure-induced metallization and superconductivity in the layered van der Waals semiconductor GaTe. Physical Review B, 2023, 107, .	3.2	2
121	Multiple-Intercalation Stages and Universal <i>T</i> -Enhancement through Polar Organic Species in Electron-Doped 1T-SnSe <sub>2</sub> . Inorganic Chemistry, 2023, 62, 3525-3531.	4.0	0
122	< i>Ex Situ Characterization of 1T/2H MoS <sub>2</sub> and Their Carbon Composites for Energy Applications, a Review. ACS Nano, 2023, 17, 5163-5186.	14.6	9
123	Phase Engineering of 2D Materials. Chemical Reviews, 2023, 123, 11230-11268.	47.7	11
124	Exquisite Control of Electronic and Spintronic Properties on Highly Porous Covalent Organic Frameworks (COFs): Transition Metal Intercalation in Bilayers. Physica Scripta, 0, , .	2.5	0
125	Molybdenum disulfide as a propitious electrochemical sensing material: a mini review. Journal of Solid State Electrochemistry, 0, , .	2.5	0
126	äšç³æ€æ°äžé“ç’å¥è¶...å¬1/4å½“æžç¢. Scientia Sinica: Physica, Mechanica Et Astronomica, 2023, , .	0.4	0

#	ARTICLE	IF	CITATIONS
127	Thermal stability of the CuZrSe <sub>2</sub> . Journal of Solid State Chemistry, 2023, 328, 124307.	2.9	1
128	Unraveling the mechanism of vanadium self-intercalation in 1T-VSe <sub>2</sub> : atomic-scale evidence for phase transition and superstructure model for intercalation compound. 2D Materials, 2024, 11, 025014.	4.4	1