

# Natalia Dubrovinskaia

## List of Publications by Year in descending order

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211  
papers

8,051  
citations

44444

50  
h-index

68831

81  
g-index

221  
all docs

221  
docs citations

221  
times ranked

6835  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of calcium orthocarbonate, $\text{Ca}_2\text{CO}_4$ <i>Pnma</i> at <i>P-T</i> conditions of Earth's transition zone and lower mantle. <i>American Mineralogist</i> , 2022, 107, 336-342.	0.9	23
2	A Reentrant Phase Transition and a Novel Polymorph Revealed in High-Pressure Investigations of $\text{CF}_4$ up to 46.5 GPa. <i>Journal of Chemical Physics</i> , 2022, 156, 044503.	1.2	2
3	Edge-sharing $\text{BO}_4$ tetrahedra and penta-coordinated silicon in the high-pressure modification of $\text{NaBSi}_3\text{O}_8$ . <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1735-1742.	3.0	6
4	High-pressure $\text{NaBSi}_3\text{O}_8$ $\text{BO}_4$ tetrahedra and penta-coordinated silicon in the high-pressure modification of $\text{NaBSi}_3\text{O}_8$ . <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1735-1742.		

#	ARTICLE	IF	CITATIONS
19	High-Pressure Synthesis of the $\hat{\Gamma}^2$ -Zn <sub>3</sub> N <sub>2</sub> Nitride and the $\hat{\Gamma}^{\pm}$ -ZnN <sub>4</sub> and $\hat{\Gamma}^2$ -ZnN <sub>4</sub> Polynitrogen Compounds. Inorganic Chemistry, 2021, 60, 14594-14601.	1.9	15
20	Novel High-Pressure Yttrium Carbide $\hat{\Gamma}^3$ -Y <sub>4</sub> C <sub>5</sub> Containing [ C <sub>2</sub> ] and Nonlinear [ C <sub>3</sub> ] Units with Unusually Large Formal Charges. Physical Review Letters, 2021, 127, 135501.	2.9	6
21	Synthesis, crystal structure and structure-property relations of strontium orthocarbonate, Sr <sub>2</sub> CO <sub>4</sub> . Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 131-137.	0.5	16
22	<i>In situ</i> high-pressure nuclear magnetic resonance crystallography in one and two dimensions. Matter and Radiation at Extremes, 2021, 6, .	1.5	9
23	Nitride Spinel: An Ultraincompressible High-Pressure Form of BeP <sub>2</sub> N <sub>4</sub> . Angewandte Chemie, 2020, 132, 2752-2756.	1.6	5
24	Nitride Spinel: An Ultraincompressible High-Pressure Form of BeP <sub>2</sub> N <sub>4</sub> . Angewandte Chemie - International Edition, 2020, 59, 2730-2734.	7.2	13
25	Novel sulfur hydrides synthesized at extreme conditions. Physical Review B, 2020, 102, .	1.1	26
26	Nuclear spin coupling crossover in dense molecular hydrogen. Nature Communications, 2020, 11, 6334.	5.8	7
27	Structural Study of $\hat{\Gamma}$ -AlOOH Up to 29 GPa. Minerals (Basel, Switzerland), 2020, 10, 1055.	0.8	8
28	Proton mobility in metallic copper hydride from high-pressure nuclear magnetic resonance. Physical Review B, 2020, 102, .	1.1	14
29	High-Pressure Polymeric Nitrogen Allotrope with the Black Phosphorus Structure. Physical Review Letters, 2020, 124, 216001.	2.9	119
30	High-Pressure Synthesis of Metal-Inorganic Frameworks Hf <sub>4</sub> N <sub>20</sub> ·xN <sub>2</sub> , WN <sub>8</sub> ·xN <sub>2</sub> , and Os <sub>5</sub> N <sub>28</sub> ·3xN <sub>2</sub> with Polymeric Nitrogen Linkers. Angewandte Chemie - International Edition, 2020, 59, 10321-10326.	7.2	36
31	High-Pressure Synthesis of Metal-Inorganic Frameworks Hf <sub>4</sub> N <sub>20</sub> ·xN <sub>2</sub> , WN <sub>8</sub> ·xN <sub>2</sub> , and Os <sub>5</sub> N <sub>28</sub> ·3xN <sub>2</sub> with Polymeric Nitrogen Linkers. Angewandte Chemie, 2020, 132, 10407-10412.	1.6	8
32	Innen-Äktitelbild: High-Pressure Synthesis of Metal-Inorganic Frameworks Hf <sub>4</sub> N <sub>20</sub> ·xN <sub>2</sub> , WN <sub>8</sub> ·xN <sub>2</sub> , and Os <sub>5</sub> N <sub>28</sub> ·3xN <sub>2</sub> with Polymeric Nitrogen Linkers (Angew. Chem.) Tj ET Cq 0 0 r gBT /Overl	1.6	0
33	The Effect of Pulsed Laser Heating on the Stability of Ferropicriase at High Pressures. Minerals (Basel, Switzerland), 2020, 10, 542.	0.8	2
34	Synthesis of palladium carbides and palladium hydride in laser heated diamond anvil cells. Journal of Alloys and Compounds, 2020, 844, 156179.	2.8	12
35	Recreating Giants Impacts in the Laboratory: Shock Compression of Bridgmanite to 14 Mbar. Geophysical Research Letters, 2020, 47, e2019GL085476.	1.5	19
36	Novel Rhenium Carbides at 200 GPa. European Journal of Inorganic Chemistry, 2020, 2020, 2186-2190.	1.0	10

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37	Single-crystal diffractometer coupled with double-sided laser heating system at the Extreme Conditions Beamline P02.2 at PETRAIII. Review of Scientific Instruments, 2019, 90, 073907.	0.6	7
38	Synthesis of Arsenopyrite-type Rhodium Pernitride $\text{RhN}_2$ from a Single-source Azide Precursor. European Journal of Inorganic Chemistry, 2019, 2019, 3667-3671.	1.0	17
39	Pressure-Induced Hydrogen-Hydrogen Interaction in Metallic FeH Revealed by NMR. Physical Review X, 2019, 9, .	2.8	16
40	High-pressure synthesis of ultraincompressible hard rhenium nitride pernitride $\text{Re}_2(\text{N}_2)(\text{N})_2$ stable at ambient conditions. Nature Communications, 2019, 10, 2994.	5.8	65
41	Improving resolution of solid state NMR in dense molecular hydrogen. Applied Physics Letters, 2019, 115, .	1.5	7
42	Local Structure of Ferrioc Iron Formates at Low Temperature and High Pressure Studied by Mössbauer Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 21676-21684.	1.5	4
43	Laser heating setup for diamond anvil cells for <i>in situ</i> synchrotron and in house high and ultra-high pressure studies. Review of Scientific Instruments, 2019, 90, .	0.6	50
44	Synthesis of magnesium-nitrogen salts of polynitrogen anions. Nature Communications, 2019, 10, 4515.	5.8	76
45	High Pressure Investigation of the $\text{S}^{\text{N}}_2$ System up to the Megabar Range: Synthesis and Characterization of the $\text{S}^{\text{N}}_2$ Solid. Inorganic Chemistry, 2019, 58, 9195-9204.	1.9	17
46	Boron Phosphorus Nitride at Extremes: $\text{PN}_6$ Octahedra in the High-pressure Polymorph $\text{P}_3\text{N}_6$ . Angewandte Chemie - International Edition, 2019, 58, 9060-9063.	7.2	13
47	Boron Phosphorus Nitride at Extremes: $\text{PN}_6$ Octahedra in the High-pressure Polymorph $\text{P}_3\text{N}_6$ . Angewandte Chemie, 2019, 131, 9158-9161.	1.6	8
48	Comparative study of the influence of pulsed and continuous wave laser heating on the mobilization of carbon and its chemical reaction with iron in a diamond anvil cell. Journal of Applied Physics, 2019, 125, .	1.1	17
49	Equations of state of rhodium, iridium and their alloys up to 70 GPa. Journal of Alloys and Compounds, 2019, 788, 212-218.	2.8	17
50	Table-top nuclear magnetic resonance system for high-pressure studies with in situ laser heating. Review of Scientific Instruments, 2019, 90, 123901.	0.6	7
51	10.1063/1.5117786.1. , 2019, , .		0
52	Stishovite's Relative: A Post-coesite Form of Phosphorus Oxonitride. Angewandte Chemie, 2018, 130, 6801-6805.	1.6	5
53	Stishovite's Relative: A Post-coesite Form of Phosphorus Oxonitride. Angewandte Chemie - International Edition, 2018, 57, 6691-6695.	7.2	11
54	Sound velocities of skiaagite-iron majorite solid solution to 56 GPa probed by nuclear inelastic scattering. Physics and Chemistry of Minerals, 2018, 45, 397-404.	0.3	8

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55	Metastable silica high pressure polymorphs as structural proxies of deep Earth silicate melts. Nature Communications, 2018, 9, 4789.	5.8	39
56	Synthesis of FeN <sub>4</sub> at 180â€¦GPa and its crystal structure from a submicron-sized grain. Acta Crystallographica Section E: Crystallographic Communications, 2018, 74, 1392-1395.	0.2	25
57	Disorderâ€“order transitions in the perovskite metalâ€“organic frameworks [(CH <sub>3</sub> ) <sub>2</sub> NH][M(HCOO) <sub>3</sub> ] at high pressure. CrystEngComm, 2018, 20, 3512-3521.	1.3	47
58	Highâ€“Pressure Synthesis of a Nitrogenâ€“Rich Inclusion Compound ReN <sub>8</sub> â€“x with Conjugated Polymeric Nitrogen Chains. Angewandte Chemie - International Edition, 2018, 57, 9048-9053.	7.2	70
59	Highâ€“Pressure Synthesis of a Nitrogenâ€“Rich Inclusion Compound ReN <sub>8</sub> â€“x with Conjugated Polymeric Nitrogen Chains. Angewandte Chemie, 2018, 130, 9186-9191.	1.6	16
60	Crystallography taken to the extreme. Physica Scripta, 2018, 93, 062501.	1.2	7
61	Fe-N system at high pressure reveals a compound featuring polymeric nitrogen chains. Nature Communications, 2018, 9, 2756.	5.8	153
62	X-ray Microscopy Opportunities at ID 15B Beamline at the ESRF.. Microscopy and Microanalysis, 2018, 24, 238-239.	0.2	4
63	Pressure dependence of spin canting in ammonium metal formate antiferromagnets. Physical Chemistry Chemical Physics, 2018, 20, 24465-24476.	1.3	7
64	Breakdown of Magnetic Order in the Pressurized Kitaev Iridate $\hat{I}^2$ $\hat{a}^{\prime}$ $\text{Li}$ Physical Review Letters, 2018, 120, 237202.	2.9	57
65	Effect of composition on compressibility of skiaigite-Fe-majorite garnet. American Mineralogist, 2017, 102, 184-191.	0.9	4
66	Structural Stability of Boron Carbide under Pressure Proven by Spectroscopic Studies up to 73 GPa. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1357-1363.	0.6	6
67	Diamond anvils with a round table designed for high pressure experiments in DAC. High Pressure Research, 2017, 37, 475-485.	0.4	1
68	Portable double-sided pulsed laser heating system for time-resolved geoscience and materials science applications. Review of Scientific Instruments, 2017, 88, 084501.	0.6	24
69	Structural stability and mechanism of compression of stoichiometric B13C2 up to 68GPa. Scientific Reports, 2017, 7, 8969.	1.6	8
70	Nonicosahedral boron allotrope synthesized at high pressure and high temperature. Physical Review B, 2017, 95, .	1.1	14
71	High-pressure behavior of $\hat{I}^{\pm}$ -boron studied on single crystals by X-ray diffraction, Raman and IR spectroscopy. Journal of Solid State Chemistry, 2017, 245, 50-60.	1.4	9
72	Stability of Fe,Al-bearing bridgmanite in the lower mantle and synthesis of pure Fe-bridgmanite. Science Advances, 2016, 2, e1600427.	4.7	31



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91	Lonsdaleite is faulted and twinned cubic diamond and does not exist as a discrete material. Nature Communications, 2014, 5, 5447.	5.8	201
92	Peierls distortion, magnetism, and high hardness of manganese tetraboride. Physical Review B, 2014, 89, .	1.1	53
93	Bulk Silicon Crystals with the High Boron Content, Si <sub>1-x</sub> B <sub>x</sub> : Two Semiconductors Form an Unusual Metal. Chemistry of Materials, 2014, 26, 5274-5281.	3.2	15
94	Nanocrystalline diamond (NCD): an insight into structure-property relationships. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C1334-C1334.	0.0	0
95	High-pressure behavior of Fe <sub>2</sub> O <sub>3</sub> . Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C49-C49.	0.0	1
96	Transition Metal Oxides Under Extreme Conditions. , 2013, , 223-239.		6
97	Discovery of a Superhard Iron Tetraboride Superconductor. Physical Review Letters, 2013, 111, 157002. Experimental evidence of orbital order in	2.9	192
98	High-pressure behavior of structural, optical, and electronic transport properties of the golden Th <sub>2</sub> S <sub>3</sub> -type Ti <sub>2</sub> O <sub>3</sub> . Physical Review B, 2013, 88, .	1.1	27
99	The phase diagram of Na carbonate, an alkaline component of the growth medium of ultradeep diamonds. Doklady Earth Sciences, 2013, 453, 1106-1109.	1.1	24
100	The phase diagram of Na carbonate, an alkaline component of the growth medium of ultradeep diamonds. Doklady Earth Sciences, 2013, 453, 1106-1109.	0.2	11
101	Novel high pressure monoclinic Fe <sub>2</sub> O <sub>3</sub> polymorph revealed by single-crystal synchrotron X-ray diffraction studies. High Pressure Research, 2013, 33, 534-545.	0.4	29
102	Controversy about ultrahard nanotwinned cBN. Nature, 2013, 502, E1-E2.	13.7	21
103	Raman spectroscopy of glassy carbon up to 60 GPa. Applied Physics Letters, 2013, 102, .	1.5	39
104	Raman spectroscopy investigation of alpha boron at elevated pressures and temperatures. Solid State Communications, 2013, 154, 34-39.	0.9	27
105	High pressure synthesis and investigation of single crystals of metastable boron phases. High Pressure Research, 2013, 33, 673-683.	0.4	23
106	Lattice dynamics of coesite. Journal of Physics Condensed Matter, 2013, 25, 275401.	0.7	3
107	Stability of MnB <sub>2</sub> with AlB <sub>2</sub> -type structure revealed by first-principles calculations and experiments. Applied Physics Letters, 2013, 102, .	1.5	14
108	High pressure and high temperature stabilization of cubic AlN in Ti <sub>0.60</sub> Al <sub>0.40</sub> N. Journal of Applied Physics, 2013, 113, .	1.1	34

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109	In situ Raman spectroscopic study of the pressure induced structural changes in ammonia borane. <i>Journal of Chemical Physics</i> , 2012, 137, 074506.	1.2	18
110	Diamond anvils with a spherical support designed for X-ray and neutron diffraction experiments in DAC. <i>High Pressure Research</i> , 2012, 32, 537-543.	0.4	6
111	Portable double-sided laser-heating system for Mössbauer spectroscopy and X-ray diffraction experiments at synchrotron facilities with diamond anvil cells. <i>Review of Scientific Instruments</i> , 2012, 83, 124501.	0.6	50
112	BX90: A new diamond anvil cell design for X-ray diffraction and optical measurements. <i>Review of Scientific Instruments</i> , 2012, 83, 125102.	0.6	251
113	Stability and breakdown of Ca <sub>13</sub> CO <sub>3</sub> melt associated with formation of <sup>13</sup> C-diamond in static high pressure experiments up to 43GPa and 3900K. <i>Journal of Solid State Chemistry</i> , 2012, 191, 102-106.	1.4	28
114	The crystal structure of aluminum doped $\hat{\Gamma}^2$ -rhombohedral boron. <i>Journal of Solid State Chemistry</i> , 2012, 194, 188-193.	1.4	7
115	Implementation of micro-ball nanodiamond anvils for high-pressure studies above 6â€‰%Mbar. <i>Nature Communications</i> , 2012, 3, 1163.	5.8	239
116	Characterization of the Materials Synthesized by High Pressure-High Temperature Treatment of a Polymer Derived t-BC <sub>2</sub> N Ceramic. <i>Materials</i> , 2011, 4, 2061-2072.	1.3	6
117	Electron-Deficient and Polycenter Bonds in the High-Pressure $\hat{\Gamma}^3$ Phase of Boron. <i>Physical Review Letters</i> , 2011, 106, 215502.	2.9	46
118	X-ray diffraction and Mössbauer spectroscopy study of fcc iron hydride FeH at high pressures and implications for the composition of the Earth's core. <i>Earth and Planetary Science Letters</i> , 2011, 307, 409-414.	1.8	78
119	Impact of lattice vibrations on equation of state of the hardest boron phase. <i>Physical Review B</i> , 2011, 83, .	1.1	13
120	Experimental pressure-temperature phase diagram of boron: resolving the long-standing enigma. <i>Scientific Reports</i> , 2011, 1, 96.	1.6	81
121	Missing-atom structure of diamond $\hat{\Gamma}^5$ (001) twist grain boundary. <i>Physical Review B</i> , 2011, 84, .	1.1	2
122	Phase relations in Feâ€‰Niâ€‰C system at high pressures and temperatures. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 203-214.	0.3	11
123	High pressure synthesis of single crystals of $\hat{\Gamma}^{\pm}$ -boron. <i>Journal of Crystal Growth</i> , 2011, 321, 162-166.	0.7	26
124	Ruby and Sm:YAG fluorescence pressure gauges up to 120 GPa and 700 K. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	19
125	Effect of composition and pressure on phase transitions in Fe <sub>x</sub> O at low temperature. <i>Journal of Applied Physics</i> , 2011, 110, 026109.	1.1	8
126	Pressure-induced isostructural phase transformation in $\hat{\Gamma}^3$ -B <sub>28</sub> . <i>Physical Review B</i> , 2010, 82, .	1.1	27



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127	Growth of single crystals of B28 at high pressures and high temperatures. Journal of Crystal Growth, 2010, 312, 3388-3394.	0.7	12
128	Structural stability of a golden semiconducting orthorhombic polymorph of $Ti_2O_3$ under high pressures and high temperatures. Journal of Physics Condensed Matter, 2010, 22, 375402.	0.7	37
129	Single-crystal X-ray diffraction at megabar pressures and temperatures of thousands of degrees. High Pressure Research, 2010, 30, 620-633.	0.4	65
130	Diamond as a high pressure gauge up to 2.7 Mbar. Applied Physics Letters, 2010, 97, .	1.5	29
131	Structure-Property Relationships in Novel High Pressure Superhard Materials. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 419-433.	0.2	1
132	Chemical experimental charge-density study of $\beta$ -B28. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s283-s283.	0.3	0
133	Influence of global magnetic state on chemical interactions in high-pressure high-temperature synthesis of B2 Fe2Si. Applied Physics Letters, 2009, 94, 181912.	1.5	8
134	Superhard Semiconducting Optically Transparent High Pressure Phase of Boron. Physical Review Letters, 2009, 102, 185501.	2.9	139
135	Portable laser-heating system for diamond anvil cells. Journal of Synchrotron Radiation, 2009, 16, 737-741.	1.0	61
136	Polarized Raman spectroscopy of high-pressure orthorhombic boron phase. High Pressure Research, 2009, 29, 530-535.	0.4	11
137	Dissolution of boron in diamond under high pressures: experimental evidences. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s343-s343.	0.3	0
138	Synthesis of an orthorhombic high pressure boron phase. Science and Technology of Advanced Materials, 2008, 9, 044209.	2.8	78
139	Ground-state properties of boron-doped diamond. Journal of Experimental and Theoretical Physics, 2008, 106, 781-787.	0.2	7
140	An insight into what superconducts in polycrystalline boron-doped diamonds based on investigations of microstructure. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11619-11622.	3.3	57
141	Synthesis, microstructure and hardness of bulk ultrahard BN nanocomposites. Journal of Materials Research, 2008, 23, 981-993.	1.2	23
142	Large carbon-isotope shift of TC in boron-doped diamond. Applied Physics Letters, 2008, 92, .	1.5	18
143	Comment on "Synthesis of Ultra-Incompressible Superhard Rhenium Diboride at Ambient Pressure". Science, 2007, 318, 1550-1550.	6.0	86
144	Melting of ice VII and new high-pressure, high-temperature amorphous ice. , 2007, , .		3

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145	<i>In-situ</i> combined X-ray diffraction and electrical resistance measurements at high pressures and temperatures in diamond anvil cells. <i>High Pressure Research</i> , 2007, 27, 213-222.	0.4	7
146	Noblest of All Metals Is Structurally Unstable at High Pressure. <i>Physical Review Letters</i> , 2007, 98, 045503.	2.9	79
147	Sound wave velocities of fcc Fe-Ni alloy at high pressure and temperature by mean of inelastic X-ray scattering. <i>Physics of the Earth and Planetary Interiors</i> , 2007, 164, 83-89.	0.7	57
148	FeO and MnO high-pressure phase diagrams: relations between structural and magnetic properties. <i>Phase Transitions</i> , 2007, 80, 1151-1163.	0.6	17
149	Pure Iron Compressed and Heated to Extreme Conditions. <i>Physical Review Letters</i> , 2007, 99, 165505.	2.9	83
150	Body-Centered Cubic Iron-Nickel Alloy in Earth's Core. <i>Science</i> , 2007, 316, 1880-1883.	6.0	187
151	Thermally stable polycrystalline diamond sintered with calcium carbonate. <i>Diamond and Related Materials</i> , 2007, 16, 1929-1935.	1.8	34
152	Superhard nanocomposite of dense polymorphs of boron nitride: Noncarbon material has reached diamond hardness. <i>Applied Physics Letters</i> , 2007, 90, 101912.	1.5	201
153	Superior Wear Resistance of Aggregated Diamond Nanorods. <i>Nano Letters</i> , 2006, 6, 824-826.	4.5	81
154	Compressibility of boron-doped diamond. <i>High Pressure Research</i> , 2006, 26, 79-85.	0.4	5
155	Spectroscopic study of defects and inclusions in bulk poly- and nanocrystalline diamond aggregates. <i>Journal of Physics Condensed Matter</i> , 2006, 18, L493-L501.	0.7	11
156	High-pressure / High-temperature Synthesis and Characterization of Boron-doped Diamond. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2006, 61, 1561-1565.	0.3	24
157	High-brilliance X-ray system for high-pressure in-house research: applications for studies of superhard materials. <i>High Pressure Research</i> , 2006, 26, 137-143.	0.4	12
158	Mechanical properties of superhard materials synthesised at various pressure-temperature conditions investigated by nanoindentation. <i>High Pressure Research</i> , 2006, 26, 99-109.	0.4	12
159	Superconductivity in polycrystalline boron-doped diamond synthesized at 20GPa and 2700K. <i>Journal of Applied Physics</i> , 2006, 99, 033903.	1.1	38
160	Guest editors' preface. <i>High Pressure Research</i> , 2006, 26, 55-60.	0.4	0
161	Size effects on the structure and phase transition behavior of baddeleyite TiO <sub>2</sub> . <i>Solid State Communications</i> , 2005, 134, 541-546.	0.9	30
162	Internal and external electrical heating in diamond anvil cells. , 2005, , 487-501.		10

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163	Structural Characterization of the "Hard Fullerite" Phase Obtained at 13 GPa and 830K. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 83-89.	1.0	1
164	Beating the Miscibility Barrier between Iron Group Elements and Magnesium by High-Pressure Alloying. Physical Review Letters, 2005, 95, 245502.	2.9	65
165	Decomposition of ferropicriase (Mg <sub>0.80</sub> Fe <sub>0.20</sub> )O at high pressures and temperatures. Journal of Alloys and Compounds, 2005, 390, 41-45.	2.8	11
166	Phase transitions in MnO and FeO at low temperatures: A neutron powder diffraction study. Journal of Alloys and Compounds, 2005, 402, 42-45.	2.8	29
167	Nanocrystalline diamond synthesized from C <sub>60</sub> . Diamond and Related Materials, 2005, 14, 16-22.	1.8	85
168	Structural characterization of the hard fullerite phase obtained at 13 GPa and 830K. Physical Review B, 2005, 71, .	1.1	19
169	Aggregated diamond nanorods, the densest and least compressible form of carbon. Applied Physics Letters, 2005, 87, 083106.	1.5	96
170	Chemistry at extreme conditions: approaching the Earth's major interface. , 2005, , 289-314.		1
171	Iron "magnesium alloying at high pressures and temperatures. Journal of Physics Condensed Matter, 2004, 16, S1143-S1150.	0.7	15
172	Cubic TiO <sub>2</sub> as a potential light absorber in solar-energy conversion. Physical Review B, 2004, 70, .	1.1	66
173	What does 'harder than diamond' mean?. Nature Materials, 2004, 3, 576-577.	13.3	142
174	Synthesis of bulk superhard semiconducting B "C material. Applied Physics Letters, 2004, 85, 1508-1510.	1.5	68
175	Titanium metal at high pressure: Synchrotron experiments and ab initio calculations. Physical Review B, 2004, 69, .	1.1	50
176	High-pressure and high-temperature synthesis of the cubic TiO <sub>2</sub> polymorph. Physical Review B, 2004, 70, .	1.1	108
177	A class of new high-pressure silica polymorphs. Physics of the Earth and Planetary Interiors, 2004, 143-144, 231-240.	0.7	41
178	Reaction of iron and silica at core " mantle boundary conditions. Physics of the Earth and Planetary Interiors, 2004, 146, 243-247.	0.7	9
179	Angle-dispersive diffraction under non-hydrostatic stress in diamond anvil cells. Journal of Alloys and Compounds, 2004, 375, 86-92.	2.8	10
180	High-Pressure Crystallography at Elevated Temperatures: Experimental Approach. , 2004, , 393-410.		3

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181	High Pressure Mössbauer Studies on FCC Fe <sub>53</sub> Ni <sub>47</sub> Alloy. , 2004, , 389-394.		0
182	Compression behavior of nanocrystalline anatase TiO <sub>2</sub> . Solid State Communications, 2003, 125, 111-115.	0.9	66
183	Iron-silica interaction at extreme conditions and the electrically conducting layer at the base of Earth's mantle. Nature, 2003, 422, 58-61.	13.7	108
184	The structure of the metallic high-pressure Fe <sub>3</sub> O <sub>4</sub> polymorph: experimental and theoretical study. Journal of Physics Condensed Matter, 2003, 15, 7697-7706.	0.7	65
185	High-pressure and high-temperature polymorphism in silica. High Pressure Research, 2003, 23, 35-39.	0.4	9
186	MELTING CURVE OF WATER STUDIED IN EXTERNALLY HEATED DIAMOND-ANVIL CELL. High Pressure Research, 2003, 23, 307-311.	0.4	39
187	Whole-cell heater for the diamond anvil cell. Review of Scientific Instruments, 2003, 74, 3433-3437.	0.6	119
188	Equation of State and Crystal Structure of NaAlSiO <sub>4</sub> with Calcium-Ferrite Type Structure in the Conditions of the Lower Mantle. High Pressure Research, 2002, 22, 495-499.	0.4	18
189	Cotunnite-Structured Titanium Dioxide. High Pressure Research, 2002, 22, 391-394.	0.4	8
190	Compressibility of baddeleyite-type TiO <sub>2</sub> from static compression to 40 GPa. Journal of Alloys and Compounds, 2002, 340, 46-48.	2.8	15
191	Pressure-Induced Invar Effect in Fe-Ni Alloys. Physical Review Letters, 2001, 86, 4851-4854.	2.9	78
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200	Gruneisen parameter of $\mu$ -iron up to 300 GPa from in-situ X-ray study. <i>American Mineralogist</i> , 2000, 85, 386-389.	0.9	50
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207	Experimental study of thermal expansion and phase transformations in iron-rich Fe-Al alloys. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 1999, 23, 69-84.	0.7	23
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