

Jung-Fu Lin

List of Publications by Year in descending order

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197
papers

8,746
citations

46918

47
h-index

54797

84
g-index

210
all docs

210
docs citations

210
times ranked

8783
citing authors

#	ARTICLE	IF	CITATIONS
1	Molten iron in Earth-like exoplanet cores. <i>Science</i> , 2022, 375, 146-147.	6.0	5
2	Kohn anomaly and elastic softening in body-centered cubic molybdenum at high pressure. <i>Physical Review B</i> , 2022, 105, .	1.1	1
3	High thermal conductivity of stishovite promotes rapid warming of a sinking slab in Earth's mantle. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117477.	1.8	4
4	Thermal conductivity of Fe-Si alloys and thermal stratification in Earth's core. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	11
5	Transport properties of Fe-Ni-Si alloys at Earth's core conditions: Insight into the viability of thermal and compositional convection. <i>Earth and Planetary Science Letters</i> , 2021, 553, 116614.	1.8	21
6	Nonlinear Optical Absorption of ReS_2 Driven by Stacking Order. <i>ACS Photonics</i> , 2021, 8, 405-411.	3.2	16
7	Iron force constants of bridgmanite at high pressure: Implications for iron isotope fractionation in the deep mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 294, 215-231.	1.6	5
8	Tungsten Hexanitride with Single-Bonded Armchairlike Hexazine Structure at High Pressure. <i>Physical Review Letters</i> , 2021, 126, 065702.	2.9	52
9	Equation of State Measurements on Iron Near the Melting Curve at Planetary Core Conditions by Shock and Ramp Compressions. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB020008.	1.4	9
10	Electronic and crystal structures of $\text{LnFeAsO}_{1-x}\text{H}_x$ ($\text{Ln} = \text{La}, \text{Sm}$) studied by x-ray absorption spectroscopy, x-ray emission spectroscopy, and x-ray diffraction (part I: Tj ETQq 0 0 rgBT /Overlock 10 Tf 50 377 T		
11	Contrasting opacity of bridgmanite and ferropericlase in the lowermost mantle: Implications to radiative and electrical conductivity. <i>Earth and Planetary Science Letters</i> , 2021, 562, 116871.	1.8	7
12	Radiometric Temperature Determination in Nongray Bridgmanite: Applications to Melting Curve and Post-Perovskite Transition Boundary in the Lower Mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB021723.	1.4	1
13	Electronic and crystal structures of $\text{LnFeAsO}_{1-x}\text{H}_x$ ($\text{Ln} = \text{La}, \text{Sm}$) studied by x-ray absorption spectroscopy, x-ray emission spectroscopy, and x-ray diffraction: II pressure dependence. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 255603.	0.7	0
14	Nonlinear effects of hydration on high-pressure sound velocities of rhyolitic glasses. <i>American Mineralogist</i> , 2021, 106, 1143-1152.	0.9	6
15	Spectral Properties of Anhydrous Carbonates and Nitrates. <i>Earth and Space Science</i> , 2021, 8, e2021EA001844.	1.1	18
16	Elasticity of a Pseudoproper Ferroelastic Transition from Stishovite to Post-Stishovite at High Pressure. <i>Physical Review Letters</i> , 2021, 126, 025701.	2.9	14
17	Pressure-Dependent Behavior of Defect-Modulated Band Structure in Boron Arsenide. <i>Advanced Materials</i> , 2020, 32, e2001942.	11.1	18
18	Reconciliation of Experiments and Theory on Transport Properties of Iron and the Geodynamo. <i>Physical Review Letters</i> , 2020, 125, 078501.	2.9	47

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19	Melting curve of vanadium up to 256 GPa: Consistency between experiments and theory. <i>Physical Review B</i> , 2020, 102, .	1.1	24
20	Degree of Permanent Densification in Oxide Glasses upon Extreme Compression up to 24 GPa at Room Temperature. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2917-2924.	2.1	22
21	Blocked radiative heat transport in the hot pyrolitic lower mantle. <i>Earth and Planetary Science Letters</i> , 2020, 537, 116176.	1.8	15
22	Elasticity of single-crystal Fe-enriched diopside at high-pressure conditions: Implications for the origin of upper mantle low-velocity zones. <i>American Mineralogist</i> , 2020, 105, 363-374.	0.9	5
23	Prediction and Synthesis of Dysprosium Hydride Phases at High Pressure. <i>Inorganic Chemistry</i> , 2020, 59, 5303-5312.	1.9	6
24	Low thermal conductivity of iron-silicon alloys at Earth's core conditions with implications for the geodynamo. <i>Nature Communications</i> , 2020, 11, 3332.	5.8	39
25	Stacking-Order-Driven Optical Properties and Carrier Dynamics in ReS_2 . <i>Advanced Materials</i> , 2020, 32, e1908311.	11.1	38
26	Water Concentration in Single-Crystal (Al,Fe)-bearing Bridgmanite Grown From the Hydrous Melt: Implications for Dehydration Melting at the Topmost Lower Mantle. <i>Geophysical Research Letters</i> , 2019, 46, 10346-10357.	1.5	46
27	Fe Alloy Slurry and a Compacting Cumulate Pile Across Earth's Inner-Core Boundary. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 10954-10967.	1.4	5
28	Pressure effect on Kohn anomaly and electronic topological transition in single-crystal tantalum. <i>Physical Review B</i> , 2019, 100, .	1.1	13
29	Synthesis of clathrate cerium superhydride CeH_9 at 80-100 GPa with atomic hydrogen sublattice. <i>Nature Communications</i> , 2019, 10, 4453.	5.8	117
30	Elasticity of single-crystal periclase at high pressure and temperature: The effect of iron on the elasticity and seismic parameters of ferropericlase in the lower mantle. <i>American Mineralogist</i> , 2019, 104, 262-275.	0.9	27
31	Single-crystal elasticity of (Al,Fe)-bearing bridgmanite and seismic shear wave radial anisotropy at the topmost lower mantle. <i>Earth and Planetary Science Letters</i> , 2019, 518, 116-126.	1.8	14
32	The effect of substrate and surface plasmons on symmetry breaking at the substrate interface of the topological insulator Bi_2Te_3 . <i>Scientific Reports</i> , 2019, 9, 6147.	1.6	8
33	Thermal Conductivity Enhancement in MoS_2 under Extreme Strain. <i>Physical Review Letters</i> , 2019, 122, 155901.	1.1	15
34	Picosecond transient thermorefectance for thermal conductivity characterization. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2019, 23, 211-221.	1.4	17
35	Study of the Pressure-Induced Second Superconducting Phase of $(\text{NH}_3)_y\text{Cs}_{0.4}\text{FeSe}$ with Double-Dome Superconductivity. <i>Journal of the Physical Society of Japan</i> , 2019, 88, 074704.	0.7	3
36	Iron isotopic fractionation in mineral phases from Earth's lower mantle: Did terrestrial magma ocean crystallization fractionate iron isotopes?. <i>Earth and Planetary Science Letters</i> , 2019, 506, 113-122.	1.8	17

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37	Large time-varying inductance load for studying power flow on the Z machine. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	0.6	9
38	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed $MoSe_2$ WSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018, 122, 5820-5828.	1.5	19
39	Effects of iron on the lattice thermal conductivity of Earth's deep mantle and implications for mantle dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4099-4104.	3.3	57
40	Shock Compression and Melting of an Fe-Ni-Si Alloy: Implications for the Temperature Profile of the Earth's Core and the Heat Flux Across the Core-Mantle Boundary. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 1314-1327.	1.4	28
41	New High-Pressure Phase of $CaCO_3$ at the Topmost Lower Mantle: Implication for the Deep-Mantle Carbon Transportation. <i>Geophysical Research Letters</i> , 2018, 45, 1355-1360.	1.5	30
42	Reentrant valence transition in $YbCu_4.5$ under pressure. <i>Physical Review B</i> , 2018, 97, .	4.5	1
43	Structural, vibrational, and electronic topological transitions of $Bi_{1.5}Sb_{0.5}Te_{1.8}Se_{1.2}$ under pressure. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	14
44	Towards band structure and band offset engineering of monolayer MoS_2 ($1\hat{x}$) WS_2 ($1\hat{x}$) via Strain. <i>2D Materials</i> , 2018, 5, 015008.	2.0	28
45	Elasticity of lower-mantle bridgmanite. <i>Nature</i> , 2018, 564, E18-E26.	13.7	17
46	Anisotropic Electron-Phonon Interactions in Angle-Resolved Raman Study of Strained Black Phosphorus. <i>ACS Nano</i> , 2018, 12, 12512-12522.	7.3	33
47	Melting behavior of the lower-mantle ferropericlase across the spin crossover: Implication for the ultra-low velocity zones at the lowermost mantle. <i>Earth and Planetary Science Letters</i> , 2018, 503, 1-9.	1.8	25
48	Elastic stability of CO_2 phase I under high temperature and pressure. <i>Physical Review B</i> , 2018, 98, .	1.1	2
49	Abnormal Elasticity of Fe-Bearing Bridgmanite in the Earth's Lower Mantle. <i>Geophysical Research Letters</i> , 2018, 45, 4725-4732.	1.5	27
50	Anisotropic Saturable and Excited-State Absorption in Bulk ReS_2 . <i>Advanced Optical Materials</i> , 2018, 6, 1800137.	3.6	38
51	Electrical Resistivity of Fe-C Alloy at High Pressure: Effects of Carbon as a Light Element on the Thermal Conductivity of the Earth's Core. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 3564-3577.	1.4	23
52	Feldspar Raman shift and application as a magmatic thermobarometer. <i>American Mineralogist</i> , 2018, 103, 600-609.	0.9	13
53	<i>SciPhon</i> : a data analysis software for nuclear resonant inelastic X-ray scattering with applications to Fe, Kr, Sn, Eu and Dy. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1581-1599.	1.0	29
54	Equation of state and hyperfine parameters of high-spin bridgmanite in the Earth's lower mantle by synchrotron X-ray diffraction and Mössbauer spectroscopy. <i>American Mineralogist</i> , 2017, 102, 357-368.	0.9	26

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55	Iron isotopic fractionation between silicate mantle and metallic core at high pressure. <i>Nature Communications</i> , 2017, 8, 14377.	5.8	34
56	Abnormal Elasticity of Single-Crystal Magnesiosiderite across the Spin Transition in Earth's Lower Mantle. <i>Physical Review Letters</i> , 2017, 118, 036402.	2.9	34
57	Iron partitioning between ferropericlase and bridgmanite in the Earth's lower mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 1074-1087.	1.4	21
58	Seismic anisotropy of the D ⁴³ layer induced by (001) deformation of post-perovskite. <i>Nature Communications</i> , 2017, 8, 14669.	5.8	20
59	Reduced lattice thermal conductivity of Fe-bearing bridgmanite in Earth's deep mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 4900-4917.	1.4	53
60	Iron partitioning in natural lower-mantle minerals: Toward a chemically heterogeneous lower mantle. <i>American Mineralogist</i> , 2017, 102, 824-832.	0.9	17
61	Radiative conductivity and abundance of post-perovskite in the lowermost mantle. <i>Earth and Planetary Science Letters</i> , 2017, 479, 43-49.	1.8	25
62	Electronic structures and spin states of BaFe ₂ As ₂ and SrFe ₂ As ₂ probed by x-ray emission spectroscopy at Fe and As K-absorption edges. <i>Physical Review B</i> , 2017, 96, .	1.1	9
63	Experimental evidence of exciton capture by mid-gap defects in CVD grown monolayer MoSe ₂ . <i>Npj 2D Materials and Applications</i> , 2017, 1, .	3.9	56
64	Optical signatures of low spin Fe ³⁺ in NAL at high pressure. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3565-3573.	1.4	14
65	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe ₂ . <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3556-3563.	2.1	36
66	Pressure-induced anomalous valence crossover in cubic YbCu ₅ -based compounds. <i>Scientific Reports</i> , 2017, 7, 5846.	1.6	14
67	Implementation of single-shot ellipsometry on gas gun experiments. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	1
68	A Low Viscosity Lunar Magma Ocean Forms a Stratified Anorthitic Flotation Crust With Mafic Poor and Rich Units. <i>Geophysical Research Letters</i> , 2017, 44, 11,282.	1.5	35
69	Seismic parameters of hcp-Fe alloyed with Ni and Si in the Earth's inner core. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 610-623.	1.4	16
70	Pressure-Induced Charge Transfer Doping of Monolayer Graphene/MoS ₂ Heterostructure. <i>Small</i> , 2016, 12, 4063-4069.	5.2	45
71	High pressure Raman study of layered Mo _{0.5} W _{0.5} S ₂ ternary compound. <i>2D Materials</i> , 2016, 3, 025003.	2.0	20
72	Elasticity of methane hydrate phases at high pressure. <i>Journal of Chemical Physics</i> , 2016, 144, 154501.	1.2	4

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73	Origin of superconductivity in the Weyl semimetal WTe_2 under pressure. <i>Physical Review B</i> , 2016, 94, .	1.1	91
74	Phase relations of Fe_3C and Fe_7C_3 up to 185 GPa and 5200 K: Implication for the stability of iron carbide in the Earth's core. <i>Geophysical Research Letters</i> , 2016, 43, 12,415.	1.5	35
75	Origin of Pressure-induced Superconducting Phase in $\text{KxFe}_2\text{ySe}_2$ studied by Synchrotron X-ray Diffraction and Spectroscopy. <i>Scientific Reports</i> , 2016, 6, 30946.	1.6	16
76	Two-stage spin transition of iron in FeAlO_3 bearing phase D at lower mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 6411-6420.	1.4	12
77	High-spin Fe^{2+} and Fe^{3+} in single-crystal aluminous bridgmanite in the lower mantle. <i>Geophysical Research Letters</i> , 2016, 43, 6952-6959.	1.5	23
78	Elasticity of single-crystal superhydrous phase B at simultaneous high pressure-temperature conditions. <i>Geophysical Research Letters</i> , 2016, 43, 8458-8465.	1.5	18
79	Elasticity of single-crystal NAL phase at high pressure: A potential source of the seismic anisotropy in the lower mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 5696-5707.	1.4	7
80	Elasticity of ferropericlase and seismic heterogeneity in the Earth's lower mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 8488-8500.	1.4	17
81	Non-destructive measurement of photoexcited carrier transport in graphene with ultrafast grating imaging technique. <i>Carbon</i> , 2016, 107, 233-239.	5.4	18
82	Confirming a pyrolytic lower mantle using self-consistent pressure scales and new constraints on CaSiO_3 perovskite. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 4876-4894.	1.4	24
83	Anomalous bulk modulus in vanadate spinels. <i>Physical Review B</i> , 2016, 94, .	1.1	9
84	Pressure-induced phase transition in LaCo_5 studied by x-ray emission spectroscopy, x-ray diffraction, and density functional theory. <i>Physical Review B</i> , 2016, 94, .	1.1	7
85	Synchrotron-based high-pressure research in materials science. <i>MRS Bulletin</i> , 2016, 41, 473-478.	1.7	7
86	Spin transition of ferric iron in the NAL phase: Implications for the seismic heterogeneities of subducted slabs in the lower mantle. <i>Earth and Planetary Science Letters</i> , 2016, 434, 91-100.	1.8	30
87	Recent advances in high-pressure science and technology. <i>Matter and Radiation at Extremes</i> , 2016, 1, 59-75.	1.5	98
88	Synthesis, electronic transport and optical properties of $\text{Si}_{1-x}\text{Fe}_x\text{O}_3$ single crystals. <i>Journal of Materials Chemistry C</i> , 2016, 4, 559-567.	2.7	26
89	Pressure and temperature dependence of the Ce valence and d - f hybridization gap in CeT_2In_5 ($T=\text{Co}, \text{Rh}, \text{Ir}$) heavy-fermion superconductors. <i>Physical Review B</i> , 2015, 92, .	1.1	7
90	Effects of the Fe^{3+} spin transition on the equation of state of bridgmanite. <i>Geophysical Research Letters</i> , 2015, 42, 4335-4342.	1.5	37

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91	Elasticity of Ferropiclasite across the Spin Crossover in the Earth's Lower Mantle. <i>Scientific Reports</i> , 2015, 5, 17188.	1.6	44
92	High-Pressure Orthorhombic Ferromagnesite as a Potential Deep-Mantle Carbon Carrier. <i>Scientific Reports</i> , 2015, 5, 7640.	1.6	51
93	Nuclear resonant inelastic X-ray scattering at high pressure and low temperature. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 760-765.	1.0	14
94	Elasticity of single-crystal olivine at high pressures and temperatures. <i>Earth and Planetary Science Letters</i> , 2015, 426, 204-215.	1.8	61
95	Synthesis of large and homogeneous single crystals of water-bearing minerals by slow cooling at deep-mantle pressures. <i>American Mineralogist</i> , 2015, 100, 1483-1492.	0.9	20
96	Pressure-Modulated Conductivity, Carrier Density, and Mobility of Multilayered Tungsten Disulfide. <i>ACS Nano</i> , 2015, 9, 9117-9123.	7.3	120
97	Determination of the full elastic tensor of single crystals using shear wave velocities by Brillouin spectroscopy. <i>American Mineralogist</i> , 2015, 100, 2590-2601.	0.9	10
98	Experimental study of thermal conductivity at high pressures: Implications for the deep Earth's interior. <i>Physics of the Earth and Planetary Interiors</i> , 2015, 247, 11-16.	0.7	40
99	Strength of tungsten triboride under pressure up to 86 GPa from radial X-ray diffraction. <i>Journal of Alloys and Compounds</i> , 2015, 621, 116-120.	2.8	7
100	Pressure-Dependent Optical and Vibrational Properties of Monolayer Molybdenum Disulfide. <i>Nano Letters</i> , 2015, 15, 346-353.	4.5	284
101	Strength and structural phase transitions of gadolinium at high pressure from radial X-ray diffraction. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	5
102	Abnormal acoustic wave velocities in basaltic and (Fe,Al)-bearing silicate glasses at high pressures. <i>Geophysical Research Letters</i> , 2014, 41, 8832-8839.	1.5	24
103	Pressure-induced valence change of YbNiCe ₃ investigated by resonant x-ray emission spectroscopy at the Yb L _{2,3} edge. <i>Physical Review B</i> , 2014, 89, .	1.1	20
104	Role of Valence Fluctuations in the Superconductivity of Ce ₁₂₂ Compounds. <i>Physical Review Letters</i> , 2014, 113, 086403.	2.9	25
105	Thermal equation of state and spin transition of magnesiosiderite at high pressure and temperature. <i>American Mineralogist</i> , 2014, 99, 84-93.	0.9	48
106	Pressure-induced semiconducting to metallic transition in multilayered molybdenum disulfide. <i>Nature Communications</i> , 2014, 5, 3731.	5.8	495
107	Pressure-induced valence change of YbNiCe ₃ investigated by resonant x-ray emission spectroscopy at the Yb L _{2,3} edge. <i>Physical Review B</i> , 2014, 89, .	1.1	20
108	Improved Visible Light Harvesting of WO ₃ by Incorporation of Sulfur or Iodine: A Tale of Two Impurities. <i>Chemistry of Materials</i> , 2014, 26, 1670-1677.	3.2	83

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109	Raman and Nuclear Resonant Spectroscopy in Geosciences. , 2014, , 195-211.		4
110	Spin and valence states of iron in Al-bearing silicate glass at high pressures studied by synchrotron Mossbauer and X-ray emission spectroscopy. American Mineralogist, 2014, 99, 415-423.	0.9	35
111	Single-crystal elasticity of the deep-mantle magnesite at high pressure and temperature. Earth and Planetary Science Letters, 2014, 392, 292-299.	1.8	39
112	Amorphous FeOOH Oxygen Evolution Reaction Catalyst for Photoelectrochemical Water Splitting. Journal of the American Chemical Society, 2014, 136, 2843-2850.	6.6	524
113	Sound velocities of bcc-Fe and Fe _{0.85} Si _{0.15} alloy at high pressure and temperature. Physics of the Earth and Planetary Interiors, 2014, 233, 24-32.	0.7	21
114	Abnormal Elastic and Vibrational Behaviors of Magnetite at High Pressures. Scientific Reports, 2014, 4, 6282.	1.6	27
115	Synchrotron Mossbauer study of Fe-bearing pyrope at high pressures and temperatures. American Mineralogist, 2013, 98, 1146-1152.	0.9	6
116	Phase Diagram and Physical Properties of H ₂ O at High Pressures and Temperatures: Applications to Planetary Interiors. Geophysical Monograph Series, 2013, , 159-169.	0.1	3
117	Spin transition of Fe ²⁺ in ringwoodite (Mg,Fe) ₂ SiO ₄ at high pressures. American Mineralogist, 2013, 98, 1803-1810.	0.9	9
118	Combined Charge Carrier Transport and Photoelectrochemical Characterization of BiVO ₄ Single Crystals: Intrinsic Behavior of a Complex Metal Oxide. Journal of the American Chemical Society, 2013, 135, 11389-11396.	6.6	435
119	Anomalous perovskite PbRuO ₃ stabilized under high pressure. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20003-20007.	3.3	14
120	Spin transition of Fe ³⁺ in Al-bearing phase D: An alternative explanation for small-scale seismic scatterers in the mid-lower mantle. Earth and Planetary Science Letters, 2013, 382, 1-9.	1.8	22
121	Elasticity of single-crystal iron-bearing pyrope up to 20 GPa and 750 K. Earth and Planetary Science Letters, 2013, 361, 134-142.	1.8	45
122	Using the Earth as a Polarized Electron Source to Search for Long-Range Spin-Spin Interactions. Science, 2013, 339, 928-932.	6.0	69
123	Garnet-to-Perovskite Transition in Gd ₃ Sc ₂ Ga ₃ O ₁₂ at High Pressure and High Temperature. Inorganic Chemistry, 2013, 52, 431-434.	1.9	10
124	Unified understanding of the valence transition in the rare-earth monochalcogenides under pressure. Physical Review B, 2013, 87, .	1.1	45
125	Magnesite formation from MgO and CO ₂ at the pressures and temperatures of Earth's mantle. American Mineralogist, 2013, 98, 1211-1218.	0.9	19
126	EFFECTS OF THE ELECTRONIC SPIN TRANSITIONS OF IRON IN LOWER MANTLE MINERALS: IMPLICATIONS FOR DEEP MANTLE GEOPHYSICS AND GEOCHEMISTRY. Reviews of Geophysics, 2013, 51, 244-275.	9.0	201

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127	Quantum critical point and spin fluctuations in lower-mantle ferropiclasite. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7142-7147.	3.3	29
128	Valence transitions in the heavy-fermion compound YbCuAl as a function of temperature and pressure. Physical Review B, 2013, 87, .	1.1	24
129	Radial x-ray diffraction of tungsten tetraboride to 86 GPa under nonhydrostatic compression. Journal of Applied Physics, 2013, 113, 033507.	1.1	23
130	Pressure-decoupled magnetic and structural transitions of the parent compound of iron-based 122 superconductors BaFe ₂ As ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17263-17266.	3.3	42
131	Electronic spin transition of iron in the Earth's lower mantle. , 2013, , 517-524.		0
132	Vibrational and elastic properties of ferromagnesite across the electronic spin-pairing transition of iron. American Mineralogist, 2012, 97, 583-591.	0.9	64
133	Electronic transitions in CePd ₂ Si ₂ studied by resonant x-ray emission spectroscopy at high pressures and low temperatures. Physical Review B, 2012, 86, .	1.1	12
134	Ruby pressure scale in a low-temperature diamond anvil cell. Journal of Applied Physics, 2012, 112, .	1.1	45
135	Sound velocities of Fe and Fe-Si alloy in the Earth's core. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10239-10244.	3.3	93
136	P-T phase diagram of iron arsenide superconductor NdFeAsO _{0.88} F _{0.12} . Europhysics Letters, 2012, 100, 46005.	0.7	3
137	Sound velocities of hydrous ringwoodite to 16 GPa and 673 K. Earth and Planetary Science Letters, 2012, 331-332, 112-119.	1.8	66
138	Electronic spin states of ferric and ferrous iron in the lower-mantle silicate perovskite. American Mineralogist, 2012, 97, 592-597.	0.9	58
139	Electronic spin transition of iron in the Earth's lower mantle. Hyperfine Interactions, 2012, 207, 81-88.	0.2	5
140	Electronic structure of YbGa $\frac{1}{15}$	1.1	14
141	Thermal equation of state of lower-mantle ferropiclasite across the spin crossover. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	70
142	Iron-rich perovskite in the Earth's lower mantle. Earth and Planetary Science Letters, 2011, 309, 179-184.	1.8	41
143	Pressure and Temperature Dependences of the Electronic Structure of CeIrSi ₃ Probed by Resonant X-ray Emission Spectroscopy. Journal of the Physical Society of Japan, 2011, 80, 124701.	0.7	10
144	Strong Coupling between 4f Valence Instability and 3d Ferromagnetism in Yb _x Fe ₄ Sb ₁₂ Studied by Resonant X-Ray Emission Spectroscopy. Physical Review Letters, 2011, 107, 177203.	2.9	28

#	ARTICLE	IF	CITATIONS
145	Minimum density of states of Fe $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{O} \langle \text{mml:math} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ across high-pressure structural and electronic transitions. <i>Physical Review B</i> , 2011, 84, .	1.1	12
146	High-pressure X-ray diffraction and X-ray emission studies on iron-bearing silicate perovskite under high pressures. <i>High Pressure Research</i> , 2010, 30, 230-237.	0.4	10
147	Hybridization and suppression of superconductivity in CeFeAsO Temperature and pressure-induced valence transitions in CeFeAsO . <i>Physical Review B</i> , 2010, 82, .	1.1	13
148	Hybridization and suppression of superconductivity in YbNi YbPd . <i>Physical Review B</i> , 2010, 82, .	1.1	39
149	Resonant X-ray emission study of the lower-mantle ferropericlase at high pressures. <i>American Mineralogist</i> , 2010, 95, 1125-1131.	0.9	23
150	Shear wave anisotropy of textured hcp-Fe in the Earth's inner core. <i>Earth and Planetary Science Letters</i> , 2010, 298, 361-366.	1.8	19
151	Deformation of lower-mantle ferropericlase (Mg,Fe)O across the electronic spin transition. <i>Physics and Chemistry of Minerals</i> , 2009, 36, 585-592.	0.3	39
152	Mineral Physics Quest to the Earth's Core. <i>Eos</i> , 2009, 90, 21-22.	0.1	17
153	Phase relations of Fe Si alloy in Earth's core. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	32
154	Synchrotron Mossbauer spectroscopic study of ferropericlase at high pressures and temperatures. <i>American Mineralogist</i> , 2009, 94, 594-599.	0.9	16
155	Intermediate-spin ferrous iron in lowermost mantle post-perovskite and perovskite. <i>Nature Geoscience</i> , 2008, 1, 688-691.	5.4	131
156	X-ray Raman scattering study of MgSiO_3 glass at high pressure: Implication for triclustered MgSiO_3 melt in Earth's mantle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7925-7929.	3.3	123
157	Spin transition of iron in the Earth's lower mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 170, 248-259.	0.7	84
158	Frontiers and grand challenges in mineral physics of the deep mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 170, 151.	0.7	0
159	Compression of single-crystal magnesium oxide to 118 GPa and a ruby pressure gauge for helium pressure media. <i>American Mineralogist</i> , 2008, 93, 1823-1828.	0.9	89
160	A New Experimental Capability for Nuclear Resonant Scattering under Simultaneous High Pressure and High Temperature at 3-ID, APS. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
161	Comment on "Spin crossover in (Mg,Fe)O: A Mossbauer effect study with an alternative interpretation of x-ray emission spectroscopy data". <i>Physical Review B</i> , 2007, 75, .	1.1	12
162	Electronic bonding transition in compressed SiO_2 glass. <i>Physical Review B</i> , 2007, 75, .	1.1	81

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164	Correction to "Sound velocities of ferropericlase in the Earth's lower mantle". <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	5
165	Electrical conductivity of the lower mantle ferropericlase across the electronic spin transition. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	56
166	Spin Transition Zone in Earth's Lower Mantle. <i>Science</i> , 2007, 317, 1740-1743.	6.0	196
167	Pressure-induced electronic spin transition of iron in magnesiowustite-(Mg,Fe)O. <i>Physical Review B</i> , 2006, 73, .	1.1	78
168	Valence Band X-Ray Emission Spectra of Compressed Germanium. <i>Physical Review Letters</i> , 2006, 96, 137402.	2.9	11
169	Sound velocities of ferropericlase in the Earth's lower mantle. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	57
170	Pressure-Induced Phase Transformations in LiAlH ₄ . <i>Journal of Physical Chemistry B</i> , 2006, 110, 11088-11097.	1.2	37
171	Pressure effect on the electronic structure of iron in (Mg,Fe)(Si,Al)O ₃ perovskite: a combined synchrotron Mössbauer and X-ray emission spectroscopy study up to 100 GPa. <i>Physics and Chemistry of Minerals</i> , 2006, 33, 575-585.	0.3	77
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176	In situ Raman spectroscopy with laser-heated diamond anvil cells. , 2005, , 413-423.		0
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179	Melting behavior of H ₂ O at high pressures and temperatures. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	81
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182	In situ high P-T Raman spectroscopy and laser heating of carbon dioxide. Journal of Chemical Physics, 2004, 121, 2780.	1.2	70
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