

# David Kohlstedt

## List of Publications by Citations

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53  
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169  
ext. papers

15,223  
ext. citations

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avg, IF

6.5  
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#	Paper	IF	Citations
167	Limits on lithospheric stress imposed by laboratory experiments. <i>Journal of Geophysical Research</i> , <b>1980</b> , 85, 6248-6252		1414
166	Water in the oceanic upper mantle: implications for rheology, melt extraction and the evolution of the lithosphere. <i>Earth and Planetary Science Letters</i> , <b>1996</b> , 144, 93-108	5.3	1277
165	Strength of the lithosphere: Constraints imposed by laboratory experiments. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 17587-17602		1164
164	Solubility of water in the fluid phases of (Mg,Fe) <sub>2</sub> SiO <sub>4</sub> . <i>Contributions To Mineralogy and Petrology</i> , <b>1996</b> , 123, 345-357	3.5	757
163	Rheology of the Upper Mantle and the Mantle Wedge: A View from the Experimentalists. <i>Geophysical Monograph Series</i> , <b>2003</b> , 83-105	1.1	592
162	Melt segregation and strain partitioning: implications for seismic anisotropy and mantle flow. <i>Science</i> , <b>2003</b> , 301, 1227-30	33.3	409
161	Influence of water on plastic deformation of olivine aggregates: 1. Diffusion creep regime. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 21457-21469		388
160	Influence of water on plastic deformation of olivine aggregates: 2. Dislocation creep regime. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 21471-21481		373
159	Low-stress high-temperature creep in olivine single crystals. <i>Journal of Geophysical Research</i> , <b>1974</b> , 79, 2045-2051		317
158	Diffusion of hydrogen in olivine: Implications for water in the mantle. <i>Journal of Geophysical Research</i> , <b>1990</b> , 95, 5079		314
157	Experimental constraints on the dynamics of the partially molten upper mantle: Deformation in the diffusion creep regime. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 1981-2001		308
156	The role of water in the deformation of olivine single crystals. <i>Journal of Geophysical Research</i> , <b>1985</b> , 90, 11319		303
155	Experimental constraints on the dynamics of the partially molten upper mantle: 2. Deformation in the dislocation creep regime. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 15441-15449		259
154	High-temperature creep of olivine single crystals 1. Mechanical results for buffered samples. <i>Journal of Geophysical Research</i> , <b>1991</b> , 96, 2441		231
153	Diffusion of Hydrogen and Intrinsic Point Defects in Olivine. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>1998</b> , 207, 147-162	3.1	196
152	New technique for decorating dislocations in olivine. <i>Science</i> , <b>1976</b> , 191, 1045-6	33.3	172
151	Grain boundary sliding in San Carlos olivine: Flow law parameters and crystallographic-preferred orientation. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		169

150	Solubility of hydrogen in olivine: dependence on temperature and iron content. <i>Contributions To Mineralogy and Petrology</i> , <b>2004</b> , 147, 155-161	3.5	166
149	Stress-driven melt segregation in partially molten rocks. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2003</b> , 4, n/a-n/a	3.6	165
148	Laboratory study of dislocation climb and diffusion in olivine. <i>Journal of Geophysical Research</i> , <b>1973</b> , 78, 5961-5971		164
147	Substantial hydrogen solubility in olivine and implications for water storage in the mantle. <i>Nature</i> , <b>1992</b> , 357, 672-674	50.4	162
146	Rheology and structure of olivine-basalt partial melts. <i>Journal of Geophysical Research</i> , <b>1986</b> , 91, 9315		161
145	Shearing Melt Out of the Earth: An Experimentalist's Perspective on the Influence of Deformation on Melt Extraction. <i>Annual Review of Earth and Planetary Sciences</i> , <b>2009</b> , 37, 561-593	15.3	146
144	Grain boundaries as reservoirs of incompatible elements in the Earth's mantle. <i>Nature</i> , <b>2004</b> , 427, 699-703	50.4	143
143	RHEOLOGY OF PARTIALLY MOLTEN MANTLE ROCKS. <i>Annual Review of Earth and Planetary Sciences</i> , <b>1996</b> , 24, 41-62	15.3	130
142	Deformation-induced microstructures, paleopiezometers, and differential stresses in deeply eroded fault zones. <i>Journal of Geophysical Research</i> , <b>1980</b> , 85, 6269-6285		129
141	Stress-driven Melt Segregation and Strain Partitioning in Partially Molten Rocks: Effects of Stress and Strain. <i>Journal of Petrology</i> , <b>2007</b> , 48, 2379-2406	3.9	113
140	Melt distribution in mantle rocks deformed in shear. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 1505-1508	4.9	112
139	Influence of deformation on melt topology in peridotites. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 10257-10271		111
138	Experimental constraints on the strength of the lithospheric mantle. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		107
137	The transition from porous to channelized flow due to melt/rock reaction during melt migration. <i>Geophysical Research Letters</i> , <b>1994</b> , 21, 145-148	4.9	106
136	Natural deformation and recrystallization of some intermediate plagioclase feldspars. <i>Tectonophysics</i> , <b>1985</b> , 111, 107-131	3.1	104
135	An interconnected network of core-forming melts produced by shear deformation. <i>Nature</i> , <b>2000</b> , 403, 883-6	50.4	96
134	Influence of protons on Fe-Mg interdiffusion in olivine. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		94
133	The influence of microstructure on deformation of olivine in the grain-boundary sliding regime. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117,		87

132	Differential stress determined from deformation-induced microstructures of the Moine Thrust Zone. <i>Journal of Geophysical Research</i> , <b>1979</b> , 84, 7495-7509		85
131	The Role of Water in High-Temperature Rock Deformation. <i>Reviews in Mineralogy and Geochemistry</i> , <b>2006</b> , 62, 377-396	7.1	83
130	Rheology of Rocks. <i>AGU Reference Shelf</i> , <b>2013</b> , 148-165		82
129	Diffusional Creep and Kinetic Demixing in Yttria-Stabilized Zirconia. <i>Journal of the American Ceramic Society</i> , <b>1987</b> , 70, 531-536	3.8	82
128	Protracted fabric evolution in olivine: Implications for the relationship among strain, crystallographic fabric, and seismic anisotropy. <i>Earth and Planetary Science Letters</i> , <b>2014</b> , 387, 157-168	5.3	81
127	Microscratch analysis of the work of adhesion for Pt thin films on NiO. <i>Journal of Materials Research</i> , <b>1992</b> , 7, 1126-1132	2.5	77
126	Effect of iron content on the creep behavior of olivine: 1. Anhydrous conditions. <i>Earth and Planetary Science Letters</i> , <b>2009</b> , 287, 229-240	5.3	74
125	Laboratory measurements of the viscous anisotropy of olivine aggregates. <i>Nature</i> , <b>2012</b> , 492, 415-8	50.4	67
124	Continuous microindentation of passivating surfaces. <i>Journal of Materials Research</i> , <b>1993</b> , 8, 685-688	2.5	66
123	Analysis of dislocations in some naturally deformed plagioclase feldspars. <i>Physics and Chemistry of Minerals</i> , <b>1984</b> , 11, 153-160	1.6	66
122	Water weakening of clinopyroxene in the dislocation creep regime. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		63
121	Viscous Energy Dissipation and Strain Partitioning in Partially Molten Rocks. <i>Journal of Petrology</i> , <b>2005</b> , 46, 2569-2592	3.9	60
120	Distribution of the glass phase in hot-pressed, olivine-basalt aggregates: An electron microscopy study. <i>Contributions To Mineralogy and Petrology</i> , <b>1982</b> , 81, 253-261	3.5	60
119	Sintering of olivine and olivine-basalt aggregates. <i>Physics and Chemistry of Minerals</i> , <b>1984</b> , 11, 5-16	1.6	57
118	Stress-driven Melt Segregation in Partially Molten Olivine-rich Rocks Deformed in Torsion. <i>Journal of Petrology</i> , <b>2010</b> , 51, 21-42	3.9	56
117	Chemical Diffusion in Titanium Carbide Crystals. <i>Journal of Applied Physics</i> , <b>1970</b> , 41, 4476-4484	2.5	54
116	Dependence of dislocation creep of dunite on oxygen fugacity: Implications for viscosity variations in Earth's mantle. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		53
115	An electron microscopy study of naturally occurring oxidation produced precipitates in iron-bearing olivines. <i>Contributions To Mineralogy and Petrology</i> , <b>1975</b> , 53, 13-24	3.5	53

114	Chemistry of grain boundaries in mantle rocks. <i>American Mineralogist</i> , <b>2003</b> , 88, 1015-1019	2.9	51
113	Transmission electron microscopy investigation of the defect microstructure of four natural orthopyroxenes. <i>Contributions To Mineralogy and Petrology</i> , <b>1973</b> , 42, 169-180	3.5	51
112	Melt migration in a silicate liquid-olivine system: An experimental test of compaction theory. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 2101-2104	4.9	49
111	Effect of H <sup>+</sup> on Fe/Mg interdiffusion in olivine, (Fe,Mg) <sub>2</sub> SiO <sub>4</sub> . <i>Applied Physics Letters</i> , <b>2004</b> , 85, 209-211	3.4	48
110	Metal-ceramic interfacial fracture resistance using the continuous microscratch technique. <i>Thin Solid Films</i> , <b>1993</b> , 223, 269-275	2.2	47
109	Faulted dipoles in germanium A high-resolution transmission electron microscopy study. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1980</b> , 42, 103-121		47
108	Structural width of low-angle grain boundaries in olivine. <i>Physics and Chemistry of Minerals</i> , <b>1983</b> , 9, 133-138	1.3	46
107	Structure, Rheology and Permeability of Partially Molten Rocks at Low Melt Fractions. <i>Geophysical Monograph Series</i> , <b>2013</b> , 103-121	1.1	45
106	Equilibrium interface segregation in the diopside/forsterite system I: Analytical techniques, thermodynamics, and segregation characteristics. <i>Geochimica Et Cosmochimica Acta</i> , <b>2007</b> , 71, 1266-1280	5.5	45
105	Experimental constraints on the electrical anisotropy of the lithosphere-asthenosphere system. <i>Nature</i> , <b>2015</b> , 522, 202-6	50.4	44
104	Low-temperature syntheses of olivine and forsterite facilitated by hydrogen peroxide. <i>Chemistry of Materials</i> , <b>1991</b> , 3, 692-698	9.6	43
103	Metal-silicate segregation in deforming dunitic rocks. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2006</b> , 7, n/a-n/a	3.6	42
102	Transient creep of olivine: Point-defect relaxation times. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1988</b> , 57, 779-789		42
101	Electron Diffraction and Microscopy Studies of the Structure of Grain Boundaries in Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , <b>1980</b> , 63, 623-627	3.8	42
100	Rheology of olivine and the strength of the lithosphere. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 9-12	4.9	41
99	Water weakening of clinopyroxenite in diffusion creep. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		40
98	Equilibrium interface segregation in the diopside/forsterite system II: Applications of interface enrichment to mantle geochemistry. <i>Geochimica Et Cosmochimica Acta</i> , <b>2007</b> , 71, 1281-1289	5.5	39
97	Continuous microscratch measurements of the practical and true works of adhesion for metal/ceramic systems. <i>Journal of Materials Research</i> , <b>1996</b> , 11, 3133-3145	2.5	39

96	The dislocation structure of experimentally deformed marble. <i>Contributions To Mineralogy and Petrology</i> , <b>1977</b> , 59, 293-306	3.5	39
95	Experimental deformation of olivine single crystals at lithospheric temperatures. <i>Geophysical Research Letters</i> , <b>2009</b> , 36,	4.9	38
94	Reply to comment by P. Duval and M. Montagnat on Superplastic deformation of ice: Experimental observations <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ECV 17-1-ECV 17-5		38
93	Stress-driven Melt Segregation in Partially Molten Feldspathic Rocks. <i>Journal of Petrology</i> , <b>2010</b> , 51, 9-19	3.9	36
92	first-principles investigation of hydrous defects and IR frequencies in forsterite: The case for Si vacancies. <i>American Mineralogist</i> , <b>2011</b> , 96, 1475-1479	2.9	36
91	Influence of hydrogen on Fe/Mg interdiffusion in (Mg,Fe)O and implications for Earth's lower mantle. <i>Contributions To Mineralogy and Petrology</i> , <b>2007</b> , 154, 279-289	3.5	34
90	Dislocation creep accommodated by grain boundary sliding in dunite. <i>Journal of Earth Science (Wuhan, China)</i> , <b>2010</b> , 21, 541-554	2.2	32
89	Interfacial energies for quartz and albite in pelitic schist. <i>Contributions To Mineralogy and Petrology</i> , <b>2002</b> , 143, 664-672	3.5	32
88	State-Variable Analysis of Inelastic Deformation of TiC Single Crystals. <i>Journal of the American Ceramic Society</i> , <b>1987</b> , 70, 315-320	3.8	32
87	Rheological Weakening of Olivine-Orthopyroxene Aggregates Due To Phase Mixing: Part 2. Microstructural Development. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 7597-7612	3.6	31
86	Hydrolytic weakening in olivine single crystals. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 3465-3479	3.6	31
85	Ice-age ice-sheet rheology: constraints from the Last Glacial Maximum form of the Laurentide ice sheet. <i>Annals of Glaciology</i> , <b>2000</b> , 30, 163-176	2.5	31
84	Rutherford Backscattering Spectroscopy Study of the Kinetics of Oxidation of (Mg, Fe) <sub>2</sub> SiO <sub>4</sub> . <i>Journal of the American Ceramic Society</i> , <b>1988</b> , 71, 540-545	3.8	31
83	Reaction infiltration instabilities in experiments on partially molten mantle rocks. <i>Geology</i> , <b>2015</b> , 43, 575-578	5	27
82	Role of dynamic grain boundary wetting in fluid circulation beneath volcanic arcs. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	27
81	Deformation-induced metal melt networks in silicates: Implications for core-mantle interactions in planetary bodies. <i>Earth and Planetary Science Letters</i> , <b>2006</b> , 245, 571-580	5.3	27
80	Viscous anisotropy of textured olivine aggregates, Part 1: Measurement of the magnitude and evolution of anisotropy. <i>Earth and Planetary Science Letters</i> , <b>2016</b> , 445, 92-103	5.3	27
79	Continuous microscratch measurements of thin film adhesion strengths. <i>Journal of Adhesion Science and Technology</i> , <b>1993</b> , 7, 1279-1292	2	26

78	Low-Temperature Plasticity in Olivine: Grain Size, Strain Hardening, and the Strength of the Lithosphere. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2019</b> , 124, 5427-5449	3.6	25
77	Experimental Evidence for the Effect of Chemical Environment Upon the Creep Rate of Olivine. <i>Geophysical Monograph Series</i> , <b>2013</b> , 171-184	1.1	25
76	Crystallographic Preferred Orientation of Olivine in Sheared Partially Molten Rocks: The Source of the $\beta$ -c Switch. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2018</b> , 19, 316-336	3.6	25
75	Rheological Weakening of Olivine-Orthopyroxene Aggregates Due to Phase Mixing: 1. Mechanical Behavior. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 7584-7596	3.6	22
74	High-temperature creep of olivine single crystals III. Mechanical results for unbuffered samples and creep mechanisms. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1992</b> , 66, 1149-1181		22
73	Electron irradiation damage in natural quartz grains. <i>Physics and Chemistry of Minerals</i> , <b>1981</b> , 7, 110-116	1.6	22
72	Effect of water on rheological properties of garnet at high temperatures and pressures. <i>Earth and Planetary Science Letters</i> , <b>2013</b> , 379, 158-165	5.3	21
71	Evolution of the rheological and microstructural properties of olivine aggregates during dislocation creep under hydrous conditions. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 92-113	3.6	20
70	Creep of Fe <sub>2</sub> SiO <sub>4</sub> and Co <sub>2</sub> SiO <sub>4</sub> single crystals in controlled thermodynamic environments. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1985</b> , 51, 79-93		19
69	Creep behavior of Fe-bearing olivine under hydrous conditions. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 6039-6057	3.6	18
68	Experimental Studies of Shear Deformation of Mantle Materials: Towards Structural Geology of the Mantle. <i>Pure and Applied Geophysics</i> , <b>1998</b> , 151, 589-603	2.2	18
67	Observation of dissociated dislocations in deformed olivine. <i>Philosophical Magazine and Journal</i> , <b>1976</b> , 34, 653-658		18
66	Systematic distribution of incompatible elements in mantle peridotite: importance of intra- and inter-granular melt-like components. <i>Contributions To Mineralogy and Petrology</i> , <b>2009</b> , 158, 149-167	3.5	17
65	Experimental investigation of the creep behavior of MgO at high pressures. <i>Physics of the Earth and Planetary Interiors</i> , <b>2008</b> , 170, 170-175	2.3	17
64	Creep of (Mg, Fe)O single crystals. <i>Journal of Materials Science</i> , <b>1988</b> , 23, 3550-3557	4.3	17
63	An experimental study of pressure shadows in partially molten rocks. <i>Earth and Planetary Science Letters</i> , <b>2013</b> , 382, 77-84	5.3	16
62	High-temperature stability of San Carlos olivine. <i>Contributions To Mineralogy and Petrology</i> , <b>1987</b> , 95, 226-230	3.5	16
61	Reaction Infiltration Instabilities in Mantle Rocks: an Experimental Investigation. <i>Journal of Petrology</i> , <b>2017</b> , 58, 979-1003	3.9	15

60	An experimental study of the effects of surface tension in homogenizing perturbations in melt fraction. <i>Earth and Planetary Science Letters</i> , <b>2011</b> , 307, 349-360	5.3	14
59	Cation stacking faults in magnesium germanate spinel. <i>Physics and Chemistry of Minerals</i> , <b>1981</b> , 7, 241-245		14
58	Manganese olivine I: Electrical conductivity. <i>Physics and Chemistry of Minerals</i> , <b>1995</b> , 22, 489	1.6	13
57	Inelastic deformation of (Ti, V)C alloys. <i>Journal of Materials Science</i> , <b>1986</b> , 21, 2356-2364	4.3	13
56	Secondary dislocations in [011] tilt boundaries in germanium. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1988</b> , 57, 383-409		13
55	Investigation of the Charge Distribution in Titanium Carbide Using Electromigration. <i>Physical Review B</i> , <b>1971</b> , 3, 293-305	3.3	13
54	Experimental investigation of the creep behavior of garnet at high temperatures and pressures. <i>Journal of Earth Science (Wuhan, China)</i> , <b>2010</b> , 21, 532-540	2.2	12
53	High-temperature deformation of forsterite single crystals doped with vanadium. <i>Physics and Chemistry of Minerals</i> , <b>1986</b> , 13, 351-356	1.6	12
52	Dislocation density: stress relationships in natural and synthetic sodium chloride. <i>Tectonophysics</i> , <b>1988</b> , 148, 147-161	3.1	12
51	High-Temperature Creep of Silicate Olivines <b>1984</b> , 251-280		12
50	Direct shear of olivine single crystals. <i>Earth and Planetary Science Letters</i> , <b>2016</b> , 455, 140-148	5.3	12
49	Experimental test of the viscous anisotropy hypothesis for partially molten rocks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 12616-20	11.5	11
48	Effect of metallic melt on the viscosity of peridotite. <i>Earth and Planetary Science Letters</i> , <b>2007</b> , 260, 355-360	3.6	11
47	Partial Melting and Deformation. <i>Reviews in Mineralogy and Geochemistry</i> , <b>2002</b> , 51, 121-135	7.1	11
46	Internal Friction in Lithium Aluminosilicate Glass-Ceramics. <i>Journal of the American Ceramic Society</i> , <b>1994</b> , 77, 1169-1177	3.8	11
45	Chapter 3 Influence of Basaltic Melt on the Creep of Polycrystalline Olivine under Hydrous Conditions. <i>International Geophysics</i> , <b>1994</b> , 57, 37-53		11
44	Reactive processing of titanium carbide with titanium. <i>Journal of Materials Science</i> , <b>1984</b> , 19, 1229-1241	4.3	11
43	Brittle-Region Slip Systems in the Transition-Metal Carbides. <i>Physica Status Solidi A</i> , <b>1971</b> , 6, K25-K28		11



42	Observations of grain size sensitive power law creep of olivine aggregates over a large range of lattice-preferred orientation strength. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 506-516	3.6	11
41	Strength and deformation of planetary lithospheres 397-456		10
40	Chemical Analysis of Grain Boundaries in an Olivine-Basalt Aggregate Using High-Resolution, Analytical Electron Microscopy. <i>Geophysical Monograph Series</i> , <b>1990</b> , 211-218	1.1	10
39	High-temperature creep and kinetic decomposition of Ni <sub>2</sub> SiO <sub>4</sub> . <i>Physics and Chemistry of Minerals</i> , <b>1994</b> , 21, 234	1.6	9
38	Reactive processing of titanium carbide with titanium. <i>Journal of Materials Science</i> , <b>1984</b> , 19, 1242-1250	4.3	9
37	Effect of $\gamma$ Radiation on Plastic Flow of NaCl. <i>Journal of the American Ceramic Society</i> , <b>1981</b> , 64, 105-108	3.8	9
36	Viscous anisotropy of textured olivine aggregates: 2. Micromechanical model. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 7137-7160	3.6	9
35	Sol <sup>l</sup> Synthesis and Characterization of Magnesium Silicate Thin Films. <i>Chemistry of Materials</i> , <b>1997</b> , 9, 2567-2576	9.6	8
34	Creep Behavior of Single Crystals of Vanadium-Doped Forsterite. <i>Journal of the American Ceramic Society</i> , <b>1986</b> , 69, 770-774	3.8	8
33	Laboratory investigation of mechanisms for phase mixing in olivine + ferropericlae aggregates. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2018</b> , 376,	3	8
32	Inelastic deformation of (Ti, V)C alloys. <i>Journal of Materials Science</i> , <b>1986</b> , 21, 2347-2355	4.3	7
31	Diffusion Creep of Enstatite at High Pressures Under Hydrous Conditions. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 7718-7728	3.6	6
30	Microscale and nanoscale strain mapping techniques applied to creep of rocks. <i>Solid Earth</i> , <b>2017</b> , 8, 751-765	3.5	6
29	Effect of iron content on the creep behavior of Olivine: 2. Hydrous conditions. <i>Physics of the Earth and Planetary Interiors</i> , <b>2018</b> , 278, 26-33	2.3	6
28	TEM observation of dissociated dislocations with b = [010] in naturally deformed olivine. <i>Physics of the Earth and Planetary Interiors</i> , <b>1993</b> , 78, 131-137	2.3	6
27	Manganese olivine II: point defect relaxation. <i>Physics and Chemistry of Minerals</i> , <b>1998</b> , 25, 122-129	1.6	5
26	The effect of grain size and melt distributions on the rheology of partially molten olivine aggregates. <i>Geological Society Special Publication</i> , <b>2005</b> , 245, 291-302	1.7	5
25	High-Temperature Rheology of Calcium Aluminosilicate (Anorthite) Glass-Ceramics under Uniaxial and Triaxial Loading. <i>Journal of the American Ceramic Society</i> , <b>2001</b> , 84, 2617-2624	3.8	5

24	Natural deformation and recrystallization of some intermediate plagioclase feldsparsReply. <i>Tectonophysics</i> , <b>1986</b> , 124, 363-364	3.1	5
23	Rheological Weakening of Olivine-Orthopyroxene Aggregates Due to Phase Mixing: Effects of Orthopyroxene Volume Fraction. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2020</b> , 125, e2020JB019888	3.6	5
22	Micro-Mechanical Characterization of Tantalum Nitride Thin Films on Sapphire Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 343, 597		3
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