Donald G Isaak

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

35 papers	2,644 citations	23 h-index	36 g-index
36 ext. papers	2,742 ext. citations	4.6 avg, IF	4.66 L-index

#	Paper	IF	Citations
35	Anharmonicity and the equation of state for gold. *Journal of Applied Physics*, **1989**, 65, 1534-1543	2.5	473
34	Magnetic Collapse in Transition Metal Oxides at High Pressure: Implications for the Earth. *Science*, **1997**, 275, 654-7	33.3	280
33	High-temperature elastic constant data on minerals relevant to geophysics. *Reviews of Geophysics*, **1992**, 30, 57	23.1	226
32	High-temperature elasticity of iron-bearing olivines. *Journal of Geophysical Research*, **1992**, 97, 1871-1885		216
31	Measured elastic moduli of single-crystal MgO up to 1800 K. *Physics and Chemistry of Minerals*, **1989**, 16, 704	1.6	200
30	Elasticity of single-crystal forsterite measured to 1700 K. *Journal of Geophysical Research*, **1989**, 94, 5895		187
29	Calculated elastic and thermal properties of MGO at high pressures and temperatures. *Journal of Geophysical Research*, **1990**, 95, 7055		139
28	Elastic Constants of Mantle Minerals at High Temperature. *AGU Reference Shelf*, **2013**, 64-97		117
27	The elastic properties of an almandine-spessartine garnet and elasticity in the garnet solid solution series. *Journal of Geophysical Research*, **1976**, 81, 2483-2489		109
26	The dependence of the Anderson-Grüneisen parameter δT upon compression at extreme conditions. *Journal of Physics and Chemistry of Solids*, **1993**, 54, 221-227	3.9	85
25	High-temperature thermal expansion and elasticity of calcium-rich garnets. *Physics and Chemistry of Minerals*, **1992**, 19, 106	1.6	65
24	A model for the computation of thermal expansivity at high compression and high temperatures: MGO as an example. *Geophysical Research Letters*, **1992**, 19, 1987-1990	4.9	62
23	Measurement of elastic properties of single-crystal CaO up to 1200 K. *Physics and Chemistry of Minerals*, **1992**, 19, 96	1.6	57
22	Phase stability of wüstite at high pressure from first-principles linearized augmented plane-wave calculations. *Physical Review B*, **1993**, 47, 7720-7731	3.3	53
21	Calculated melting curves for phases of iron. *American Mineralogist*, **2000**, 85, 376-385	2.9	50
20	The relationship between shear and compressional velocities at high pressures: Reconciliation of seismic tomography and mineral physics. *Geophysical Research Letters*, **1992**, 19, 741-744	4.9	44
19	A new thermodynamic approach for high-pressure physics. *Physics of the Earth and Planetary Interiors*, **1995**, 91, 3-16	2.3	36

18	The elastic properties of single-crystal fayalite as determined by dynamical measurement techniques. *Pure and Applied Geophysics*, **1993**, 141, 393-414	2.2	31
17	The mixed P, T derivatives of elastic moduli and implications on extrapolating throughout Earthes mantle. *Physics of the Earth and Planetary Interiors*, **1993**, 80, 37-48	2.3	27
16	Thermal expansivity of HCP iron at very high pressure and temperature. *Physica B: Condensed Matter*, **2003**, 328, 345-354	2.8	26
15	Grueneisen ratios of MgO from the calculation of entropy. *The Journal of Physical Chemistry*, **1995**, 99, 7813-7818		26
14	Elasticity of fused silica spheres under pressure using resonant ultrasound spectroscopy. *Journal of the Acoustical Society of America*, **1998**, 104, 2200-2206	2.2	25
13	The elastic properties of Mg2SiO4 from 295 to 660K and implications on the composition of Earthes upper mantle. *Physics of the Earth and Planetary Interiors*, **2007**, 162, 22-31	2.3	23
12	Limits on the value of and For MgSiO3 perovskite. *Physics of the Earth and Planetary Interiors*, **1996**, 98, 31-46	2.3	21
11	Compositional constraints on the equation of state and thermal properties of the lower mantle. *Geophysical Journal International*, **2001**, 146, 143-154	2.6	20
10	Elastic and viscoelastic properties of iron at high temperatures. *Journal of Geophysical Research*, **1995**, 100, 17689-17698		13
9	The temperature dependence of the elasticity of Fe-bearing wadsleyite. *Physics of the Earth and Planetary Interiors*, **2010**, 182, 107-112	2.3	9
8	Extrapolation of lower mantle properties to zero pressure: Constraints on composition and temperature. *American Mineralogist*, **2000**, 85, 345-353	2.9	6
7	Elastic Properties of Minerals and Planetary Objects **2001**, 325-376		5
6	Elasticity of single-crystal wstite at ambient and elevated temperature from resonant ultrasound spectroscopy. *Journal of Physics and Chemistry of Solids*, **2013**, 74, 879-885	3.9	4
5	Accuracy in measurements and the temperature and volume dependence of thermoelastic parameters. *Pure and Applied Geophysics*, **1993**, 141, 327-339	2.2	4
4	The Elastic Properties of Single-crystal Fayalite as Determined by Dynamical Measurement Techniques **1993**, 393-414		3
3	Elastic Properties of Forsterite at High Pressure Obtained from the High-Temperature Database. *Geophysical Monograph Series*, **1998**, 345-355	1.1	1
2	Comment on "Thermodynamic and elastic properties of a many-body model for simple oxides". *Physical Review B*, **1991**, 44, 7106-7107	3.3	1
1	Accuracy in Measurements and the Temperature and Volume Dependence of Thermoelastic Parameters **1993**, 327-339		