

Craig R Bina

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

2,195
citations

293460

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46
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docs citations

59
times ranked

1894
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep Dehydration as a Plausible Mechanism of the 2013 Mw 8.3 Sea of Okhotsk Deep-Focus Earthquake. <i>Frontiers in Earth Science</i> , 2021, 9, .	0.8	0
2	Evidence of an east-dipping slab beneath the southern end of the Philippine Trench (14°N–16°N) as revealed by ISC-EHB. <i>Journal of Asian Earth Sciences</i> : X, 2020, 4, 100034.	0.6	3
3	Evolution of subduction dip angles and seismic stress patterns during arc-continent collision: Modeling Mindoro Island. <i>Earth and Planetary Science Letters</i> , 2020, 533, 116054.	1.8	4
4	Geodynamic subduction models constrained by deep earthquakes beneath the Japan Sea and eastern China. <i>Scientific Reports</i> , 2020, 10, 5440.	1.6	2
5	High-pressure phase transitions of clinoenstatite. <i>American Mineralogist</i> , 2019, 104, 897-904.	0.9	9
6	Boron–oxygen complex yields n-type surface layer in semiconducting diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 7703-7711.	3.3	60
7	A New High-Pressure Phase Transition in Natural Gedrite. <i>Crystals</i> , 2019, 9, 521.	1.0	2
8	Linked influences on slab stagnation: Interplay between lower mantle viscosity structure, phase transitions, and plate coupling. <i>Earth and Planetary Science Letters</i> , 2019, 509, 88-99.	1.8	20
9	HyMaTZ: A Python Program for Modeling Seismic Velocities in Hydrous Regions of the Mantle Transition Zone. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 2308-2324.	1.0	16
10	Elastic and mechanical softening in boron-doped diamond. <i>Scientific Reports</i> , 2017, 7, 42921.	1.6	10
11	High-Pressure $\text{CaMgSi}_2\text{O}_6$: Does Penta-Coordinated Silicon Exist in the Earth's Mantle?. <i>Geophysical Research Letters</i> , 2017, 44, 11,340.	1.5	18
12	Water partitioning between bridgmanite and postperovskite in the lowermost mantle. <i>Earth and Planetary Science Letters</i> , 2016, 454, 20-27.	1.8	28
13	Thermodynamic and elastic properties of pyrope at high pressure and high temperature by first-principles calculations. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 6462-6476.	1.4	33
14	Ultrahard stitching of nanotwinned diamond and cubic boron nitride in C2-BN composite. <i>Scientific Reports</i> , 2016, 6, 30518.	1.6	24
15	Comparative compressibility of hydrous wadsleyite and ringwoodite: Effect of H_2O and implications for detecting water in the transition zone. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 8259-8280.	1.4	25
16	Quantification of water in hydrous ringwoodite. <i>Frontiers in Earth Science</i> , 2015, 2, .	0.8	25
17	Small-scale lunar graben: Distribution, dimensions, and formation processes. <i>Icarus</i> , 2015, 252, 95-106.	1.1	21
18	First-principles investigation of hydrous post-perovskite. <i>Physics of the Earth and Planetary Interiors</i> , 2015, 244, 42-48.	0.7	15

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19	Geodynamics of trench advance: Insights from a Philippine-Sea-style geometry. <i>Earth and Planetary Science Letters</i> , 2015, 430, 408-415.	1.8	48
20	High-pressure radiative conductivity of dense silicate glasses with potential implications for dark magmas. <i>Nature Communications</i> , 2014, 5, 5428.	5.8	19
21	Effects of mantle and subduction-interface rheologies on slab stagnation and trench rollback. <i>Earth and Planetary Science Letters</i> , 2013, 379, 95-103.	1.8	103
22	Spin transition of Fe ³⁺ in Al-bearing phase D: An alternative explanation for small-scale seismic scatterers in the mid-lower mantle. <i>Earth and Planetary Science Letters</i> , 2013, 382, 1-9.	1.8	22
23	Garnet goes hungry. <i>Nature Geoscience</i> , 2013, 6, 335-336.	5.4	14
24	Phase transitions of harzburgite and buckled slab under eastern China. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 1182-1199.	1.0	22
25	Slab-induced waveform effects as revealed by the TAIGER seismic array: Evidence of slab beneath central Taiwan. <i>Physics of the Earth and Planetary Interiors</i> , 2012, 196-197, 62-74.	0.7	3
26	Radiative heat transfer in a hydrous mantle transition zone. <i>Earth and Planetary Science Letters</i> , 2012, 357-358, 130-136.	1.8	25
27	Buoyancy, bending, and seismic visibility in deep slab stagnation. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 183, 330-340.	0.7	18
28	Scale limits of free-silica seismic scatterers in the lower mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2010, 183, 110-114.	0.7	14
29	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
30	A global survey of stress orientations in subducting slabs as revealed by intermediate-depth earthquakes. <i>Geophysical Journal International</i> , 2004, 159, 721-733.	1.0	62
31	The Great Kanto earthquake and F. Scott Fitzgerald. <i>Eos</i> , 2001, 82, 577-577.	0.1	1
32	Variations in slab dip along the subducting Nazca Plate, as related to stress patterns and moment release of intermediate-depth seismicity and to surface volcanism. <i>Geochemistry, Geophysics, Geosystems</i> , 2001, 2, n/a-n/a.	1.0	25
33	Implications of slab mineralogy for subduction dynamics. <i>Physics of the Earth and Planetary Interiors</i> , 2001, 127, 51-66.	0.7	79
34	Possible presence of high-pressure ice in cold subducting slabs. <i>Nature</i> , 2000, 408, 844-847.	13.7	90
35	Tea Tale. <i>Science News</i> , 2000, 158, 275.	0.1	1
36	Effects of slab mineralogy on subduction rates. <i>Geophysical Research Letters</i> , 1999, 26, 119-122.	1.5	37

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37	On the cessation of seismicity at the base of the transition zone. <i>Journal of Seismology</i> , 1998, 2, 65-86.	0.6	9
38	Olivine emerges from isolation. <i>Nature</i> , 1998, 392, 651-653.	13.7	6
39	A note on latent heat release from disequilibrium phase transformations and deep seismogenesis. <i>Earth, Planets and Space</i> , 1998, 50, 1029-1034.	0.9	14
40	Free Energy Minimization by Simulated Annealing with Applications to Lithospheric Slabs and Mantle Plumes. , 1998, , 605-618.		3
41	Patterns of deep seismicity reflect buoyancy stresses due to phase transitions. <i>Geophysical Research Letters</i> , 1997, 24, 3301-3304.	1.5	50
42	Bulk sound travel times and implications for mantle composition and outer core heterogeneity. <i>Geophysical Research Letters</i> , 1997, 24, 499-502.	1.5	12
43	Phase transition buoyancy contributions to stresses in subducting lithosphere. <i>Geophysical Research Letters</i> , 1996, 23, 3563-3566.	1.5	58
44	Confidence limits for silicate perovskite equations of state. <i>Physics and Chemistry of Minerals</i> , 1995, 22, 375.	0.3	23
45	Kinematic considerations for mantle mixing. <i>Geophysical Research Letters</i> , 1995, 22, 743-746.	1.5	35
46	A note on the sensitivity of mantle convection models to composition-dependent phase relations. <i>Geophysical Research Letters</i> , 1995, 22, 2565-2568.	1.5	14
47	Frequency dependence of the visibility and depths of mantle seismic discontinuities. <i>Geophysical Research Letters</i> , 1994, 21, 2613-2616.	1.5	57
48	Phase transition Clapeyron slopes and transition zone seismic discontinuity topography. <i>Journal of Geophysical Research</i> , 1994, 99, 15853.	3.3	450
49	The deep earthquakes of 1921-1922 in Northern Peru. <i>Physics of the Earth and Planetary Interiors</i> , 1994, 87, 33-54.	0.7	19
50	Mutually consistent estimates of upper mantle composition from seismic velocity contrasts at 400 km depth. <i>Pure and Applied Geophysics</i> , 1993, 141, 101-109.	0.8	10
51	Thermodynamic coupling of phase and chemical boundaries in planetary interiors. <i>Physics of the Earth and Planetary Interiors</i> , 1993, 76, 329-341.	0.7	16
52	Mantle Discontinuities. <i>Reviews of Geophysics</i> , 1991, 29, 783-793.	9.0	36
53	<i>The Solid Earth An Introduction to Global Geophysics</i>. C. M. R. Fowler. <i>Journal of Geology</i> , 1991, 99, 635-635.	0.7	0
54	Constraints on lower mantle composition and temperature from density and bulk sound velocity profiles. <i>Geophysical Research Letters</i> , 1990, 17, 1153-1156.	1.5	67

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55	Olivine-spinel transitions: Experimental and thermodynamic constraints and implications for the nature of the 400-km seismic discontinuity. <i>Journal of Geophysical Research</i> , 1987, 92, 4853-4866.	3.3	173
56	The 400-km seismic discontinuity and the proportion of olivine in the Earth's upper mantle. <i>Nature</i> , 1986, 324, 449-451.	13.7	65
57	The eclogite to garnetite transition – Experimental and thermodynamic constraints. <i>Geophysical Research Letters</i> , 1984, 11, 955-958.	1.5	74
58	Constraints on the Temperature and Composition of the Base of the Mantle. <i>Geophysical Monograph Series</i> , 0, , 181-189.	0.1	13