

# Alan E Rubin

## List of Publications by Year in descending order

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192  
papers

10,703  
citations

20759

60  
h-index

40881

93  
g-index

202  
all docs

202  
docs citations

202  
times ranked

2549  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Progressive aqueous alteration of CM carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 2361-2382.  | 1.6 | 421       |
| 2  | Ordinary chondrites: Bulk compositions, classification, lithophile-element fractionations and composition-petrographic type relationships. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 2747-2767.               | 1.6 | 315       |
| 3  | Mineralogy of meteorite groups. <i>Meteoritics and Planetary Science</i> , 1997, 32, 231-247.  | 0.7 | 293       |
| 4  | Kamacite and olivine in ordinary chondrites: Intergroup and intragroup relationships. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 1217-1232.  | 1.6 | 253       |
| 5  | The compositional classification of chondrites: V. The Karoonda (CK) group of carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1991, 55, 881-892.   | 1.6 | 223       |
| 6  | The compositional classification of chondrites: VI. The CR carbonaceous chondrite group. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 2873-2888.   | 1.6 | 184       |
| 7  | Petrologic, geochemical and experimental constraints on models of chondrule formation. <i>Earth-Science Reviews</i> , 2000, 50, 3-27.  | 4.0 | 179       |
| 8  | Shock metamorphism of enstatite chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 847-858.  | 1.6 | 168       |
| 9  | Oxygen isotopic compositions of enstatite chondrites and aubrites. <i>Journal of Geophysical Research</i> , 1984, 89, C245.  | 3.3 | 162       |
| 10 | The oxygen isotopic composition of olivine and pyroxene from CI chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 835-845.  | 1.6 | 160       |
| 11 | A shock-metamorphic model for silicate darkening and compositionally variable plagioclase in CK and ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 1705-1714.                                 | 1.6 | 157       |
| 12 | The compositional classification of chondrites: VII. The R chondrite group. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 2243-2256.  | 1.6 | 157       |
| 13 | Original structures, and fragmentation and reassembly histories of asteroids: Evidence from meteorites. <i>Icarus</i> , 1987, 69, 1-13.  | 1.1 | 156       |
| 14 | ALH85085: a unique volatile-poor carbonaceous chondrite with possible implications for nebular fractionation processes. <i>Earth and Planetary Science Letters</i> , 1988, 91, 33-54.                                  | 1.8 | 143       |
| 15 | Chondrules, matrix and coarse-grained chondrule rims in the Allende meteorite: Origin, interrelationships and possible precursor components. <i>Geochimica Et Cosmochimica Acta</i> , 1987, 51, 1923-1937.             | 1.6 | 137       |
| 16 | Physical properties of chondrules in different chondrite groups: Implications for multiple melting events in dusty environments. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4807-4828.                         | 1.6 | 133       |
| 17 | Postshock annealing and postannealing shock in equilibrated ordinary chondrites: implications for the thermal and shock histories of chondritic asteroids. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 673-689. | 1.6 | 130       |
| 18 | Coarse-grained chondrule rims in type 3 chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1984, 48, 1779-1789.  | 1.6 | 125       |

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|----|---|-----|-----------|
| 19 | Impact melt products of chondritic material. <i>Reviews of Geophysics</i> , 1985, 23, 277-300.  | 9.0 | 124       |
| 20 | Formation of metal and silicate globules in Gujba: a new Bencubbin-like meteorite fall. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 3283-3298.   | 1.6 | 121       |
| 21 | Mineralogy and petrology of amoeboid olivine inclusions in CO3 chondrites: Relationship to parent body aqueous alteration. <i>Meteoritics and Planetary Science</i> , 2002, 37, 1781-1796.                  | 0.7 | 116       |
| 22 | Progressive aqueous alteration of CR carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 139, 267-292.  | 1.6 | 113       |
| 23 | Non-nebular origin of dark mantles around chondrules and inclusions in CM chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 1271-1290.   | 1.6 | 111       |
| 24 | Chondrules in the Qingzhen type-3 enstatite chondrite: Possible precursor components and comparison to ordinary chondrite chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1985, 49, 1781-1795.         | 1.6 | 105       |
| 25 | Compound chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 1847-1869.  | 1.6 | 100       |
| 26 | Matrix material in type 3 chondrites? occurrence, heterogeneity and relationship with chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1984, 48, 1741-1757.   | 1.6 | 99        |
| 27 | Abee and related EH chondrite impact-melt breccias. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 425-435.   | 1.6 | 98        |
| 28 | Meteoritic minerals and their origins. <i>Chemie Der Erde</i> , 2017, 77, 325-385.  | 0.8 | 95        |
| 29 | The Portales Valley meteorite breccia: evidence for impact-induced melting and metamorphism of an ordinary chondrite. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 323-342.                           | 1.6 | 93        |
| 30 | Microchondrule-bearing clast in the Piancaldoli LL3 meteorite: a new kind of type 3 chondrite and its relevance to the history of chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1982, 46, 1763-1776. | 1.6 | 92        |
| 31 | Chromite-plagioclase assemblages as a new shock indicator; implications for the shock and thermal histories of ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 2695-2709.           | 1.6 | 92        |
| 32 | Metallic copper in ordinary chondrites. <i>Meteoritics</i> , 1994, 29, 93-98.   | 1.5 | 91        |
| 33 | Collisional facilitation of aqueous alteration of CM and CV carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 90, 181-194.  | 1.6 | 90        |
| 34 | The Adhi Kot breccia and implications for the origin of chondrules and silica-rich clasts in enstatite chondrites. <i>Earth and Planetary Science Letters</i> , 1983, 64, 201-212.                          | 1.8 | 88        |
| 35 | Compositions of large metal nodules in mesosiderites: Links to iron meteorite group IIIAB and the origin of mesosiderite subgroups. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 3197-3208.           | 1.6 | 83        |
| 36 | Evolutionary History of the Mesosiderite Asteroid: A Chronologic and Petrologic Synthesis. <i>Icarus</i> , 1993, 101, 201-212.  | 1.1 | 83        |

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|----|--|------|-----------|
| 37 | The Blithfield meteorite and the origin of sulfide-rich, metal-poor clasts and inclusions in brecciated enstatite chondrites. <i>Earth and Planetary Science Letters</i> , 1984, 67, 273-283.                                | 1.8  | 82        |
| 38 | Chondrules in the Murray CM2 meteorite and compositional differences between CM-CO and ordinary chondrite chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1986, 50, 307-315.  | 1.6  | 82        |
| 39 | Size-frequency distributions of chondrules in CO3 chondrites. <i>Meteoritics</i> , 1989, 24, 179-189.  | 1.5  | 82        |
| 40 | Size-frequency distributions of chondrules and chondrule fragments in LL3 chondrites: Implications for parent-body fragmentation of chondrules. <i>Meteoritics and Planetary Science</i> , 2002, 37, 1361-1376.              | 0.7  | 82        |
| 41 | Mineralogy and petrology of the Abee enstatite chondrite breccia and its dark inclusions. <i>Earth and Planetary Science Letters</i> , 1983, 62, 118-131.  | 1.8  | 80        |
| 42 | Carbonates in CM chondrites: Complex formational histories and comparison to carbonates in CI chondrites. <i>Meteoritics and Planetary Science</i> , 2010, 45, 513-530.  | 0.7  | 79        |
| 43 | Paucity of sulfide in a large slab of Esquel: New perspectives on pallasite formation. <i>Meteoritics and Planetary Science</i> , 1998, 33, 221-227.   | 0.7  | 74        |
| 44 | The halite-bearing Zag and Monahans (1998) meteorite breccias: Shock metamorphism, thermal metamorphism and aqueous alteration on the H chondrite parent body. <i>Meteoritics and Planetary Science</i> , 2002, 37, 125-141. | 0.7  | 74        |
| 45 | Oxygen isotopes in chondrules and coarse-grained chondrule rims from the Allende meteorite. <i>Earth and Planetary Science Letters</i> , 1990, 96, 247-255.  | 1.8  | 72        |
| 46 | Troilite in the chondrules of type-3 ordinary chondrites: implications for chondrule formation. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2281-2298.  | 1.6  | 72        |
| 47 | Classification of mafic clasts from mesosiderites: Implications for endogenous igneous processes. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 827-840.  | 1.6  | 71        |
| 48 | Compositions and taxonomy of 15 unusual carbonaceous chondrites. <i>Meteoritics and Planetary Science</i> , 2010, 45, 531-554.   | 0.7  | 71        |
| 49 | Ubiquitous low-FeO relict grains in type II chondrules and limited overgrowths on phenocrysts following the final melting event. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 2239-2250.                               | 1.6  | 70        |
| 50 | Petrogenesis of acapulcoites and lodranites: A shock-melting model. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 2383-2401.  | 1.6  | 70        |
| 51 | Composition of matrix in the CR chondrite LAP 02342. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1436-1460.   | 1.6  | 68        |
| 52 | Graphite-magnetite aggregates in ordinary chondritic meteorites. <i>Nature</i> , 1981, 291, 544-546.   | 13.7 | 67        |
| 53 | Pecora Escarpment 91002: A member of the new Rumuruti (R) chondrite group. <i>Meteoritics</i> , 1994, 29, 255-264.   | 1.5  | 67        |
| 54 | Origin of metallic Fe-Ni in Renazzo and related chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 2521-2533.  | 1.6  | 65        |

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|----|--|-----|-----------|
| 55 | Shock, post-shock annealing, and post-annealing shock in ureilites. <i>Meteoritics and Planetary Science</i> , 2006, 41, 125-133.  | 0.7 | 65        |
| 56 | Maskelynite in asteroidal, lunar and planetary basaltic meteorites: An indicator of shock pressure during impact ejection from their parent bodies. <i>Icarus</i> , 2015, 257, 221-229.                              | 1.1 | 64        |
| 57 | THE COLONY METEORITE AND VARIATIONS IN CO <sub>3</sub> CHONDRITE PROPERTIES. <i>Meteoritics</i> , 1985, 20, 175-196.   | 1.5 | 63        |
| 58 | SIZE-FREQUENCY DISTRIBUTIONS OF EH <sub>3</sub> CHONDRULES. <i>Meteoritics</i> , 1987, 22, 237-251.  | 1.5 | 63        |
| 59 | Post-shock annealing of Miller Range 99301 (LL6): Implications for impact heating of ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 3327-3337.  | 1.6 | 63        |
| 60 | Pyroxene-selective impact smelting in ureilites. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 5109-5133.   | 1.6 | 62        |
| 61 | <sup>53</sup> Mn- <sup>53</sup> Cr systematics of carbonates in CM chondrites: Implications for the timing and duration of aqueous alteration. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 7433-7442.         | 1.6 | 61        |
| 62 | An American on Paris: Extent of aqueous alteration of a <sc>CM</sc> chondrite and the petrography of its refractory and amoeboid olivine inclusions. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1595-1612. | 0.7 | 61        |
| 63 | Properties of the Guin ungrouped iron meteorite: the origin of Guin and of group-IIIE irons. <i>Earth and Planetary Science Letters</i> , 1986, 76, 209-226.   | 1.8 | 59        |
| 64 | Lewis Cliff 85332: A unique carbonaceous chondrite. <i>Meteoritics</i> , 1990, 25, 215-225.  | 1.5 | 59        |
| 65 | Mineralogy of meteorite groups: An update. <i>Meteoritics and Planetary Science</i> , 1997, 32, 733-734.   | 0.7 | 59        |
| 66 | Fall, recovery, and characterization of the Novato L6 chondrite breccia. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1388-1425.   | 0.7 | 59        |
| 67 | Microchondrules in ordinary chondrites: Implications for chondrule formation. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 463-473.  | 1.6 | 58        |
| 68 | Correlated petrologic and geochemical characteristics of CO <sub>3</sub> chondrites. <i>Meteoritics and Planetary Science</i> , 1998, 33, 385-391.   | 0.7 | 58        |
| 69 | Oxygen-isotopic compositions of relict and host grains in chondrules in the Yamato 81020 CO <sub>3.0</sub> chondrite. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 3599-3606.                                  | 1.6 | 58        |
| 70 | The Villalbeto de la Peña meteorite fall: I. Fireball energy, meteorite recovery, strewn field, and petrography. <i>Meteoritics and Planetary Science</i> , 2005, 40, 795-804.                                       | 0.7 | 58        |
| 71 | Meteorite and meteoroid: new comprehensive definitions. <i>Meteoritics and Planetary Science</i> , 2010, 45, 114.  | 0.7 | 58        |
| 72 | Chondrules and matrix in the Ormans CO <sub>3</sub> meteorite: Possible precursor components. <i>Geochimica Et Cosmochimica Acta</i> , 1988, 52, 425-432.  | 1.6 | 56        |

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|----|--|------|-----------|
| 73 | The Ningqiang Meteorite: Classification and Petrology of an Anomalous CV Chondrite. <i>Meteoritics</i> , 1988, 23, 13-23.  | 1.5  | 56        |
| 74 | Silica and pyroxene in IVA irons; possible formation of the IVA magma by impact melting and reduction of L-LL-chondrite materials followed by crystallization and cooling. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 3149-3172. | 1.6  | 56        |
| 75 | Formation of mesosiderites by low-velocity impacts as a natural consequence of planet formation. <i>Nature</i> , 1985, 318, 168-170.   | 13.7 | 55        |
| 76 | Composition and formation of metal nodules and veins in ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1986, 50, 1989-1995.   | 1.6  | 55        |
| 77 | Origin of the differences in refractory-lithophile-element abundances among chondrite groups. <i>Icarus</i> , 2011, 213, 547-558.  | 1.1  | 55        |
| 78 | New kind of type 3 chondrite with a graphite-magnetite matrix. <i>Earth and Planetary Science Letters</i> , 1981, 56, 19-31.   | 1.8  | 54        |
| 79 | Reduction during metamorphism of four ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 1867-1878.   | 1.6  | 54        |
| 80 | Impact melting in the Cumberland Falls and Mayo Belwa aubrites. <i>Meteoritics and Planetary Science</i> , 2010, 45, 265-275.  | 0.7  | 54        |
| 81 | Los Angeles: A tale of two stones. <i>Meteoritics and Planetary Science</i> , 2004, 39, 137-156.   | 0.7  | 53        |
| 82 | Smyer H-chondrite impact-melt breccia and evidence for sulfur vaporization. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 699-711.  | 1.6  | 52        |
| 83 | Northwest Africa 5738: Multistage fluid-driven secondary alteration in an extraordinarily evolved eucrite. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 199-227.  | 1.6  | 52        |
| 84 | Nature of the H chondrite parent body regolith: Evidence from the Dimmitt breccia. <i>Journal of Geophysical Research</i> , 1983, 88, A741.  | 3.3  | 51        |
| 85 | Carlisle Lakes and Allan Hills 85151: Members of a new chondrite grouplet. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 3035-3044.   | 1.6  | 51        |
| 86 | Fractionation of refractory siderophile elements in metal from the Rose City meteorite. <i>Meteoritics</i> , 1995, 30, 412-417.  | 1.5  | 50        |
| 87 | The Hadley Rille enstatite chondrite and its agglutinate-like rim: Impact melting during accretion to the Moon. <i>Meteoritics and Planetary Science</i> , 1997, 32, 135-141.  | 0.7  | 50        |
| 88 | Impact melt-rock clasts in the Hvittis Enstatite chondrite breccia: Implications for a genetic relationship between El chondrites and aubrites. <i>Journal of Geophysical Research</i> , 1983, 88, B293.                                 | 3.3  | 47        |
| 89 | FRAGMENTAL BRECCIAS AND THE COLLISIONAL EVOLUTION OF ORDINARY CHONDRITE PARENT BODIES. <i>Meteoritics</i> , 1983, 18, 179-196.   | 1.5  | 46        |
| 90 | Coolidge and Loongana 001: A new carbonaceous chondrite grouplet. <i>Meteoritics</i> , 1995, 30, 20-27.  | 1.5  | 46        |

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|-----|--|-----|-----------|
| 91  | Oxygen isotopes in R-chondrite magnetite and olivine: links between R chondrites and ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 3897-3911.  | 1.6 | 46        |
| 92  | Shock effects in EH6-enstatite chondrites and implications for collisional heating of the EH and EL parent asteroids. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3757-3780.  | 1.6 | 46        |
| 93  | Formation of large metal nodules in ordinary chondrites. <i>Journal of Geophysical Research</i> , 1999, 104, 30799-30804.  | 3.3 | 45        |
| 94  | Northwest Africa 6693: A new type of FeO-rich, low- $\delta^{17}O$ , poikilitic cumulate achondrite. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 107, 135-154.  | 1.6 | 45        |
| 95  | A weathering index for CK and R chondrites. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1123-1130.  | 0.7 | 44        |
| 96  | Oxygen-isotopic compositions of low-FeO relicts in high-FeO host chondrules in Acfer 094, a type 3.0 carbonaceous chondrite closely related to CM. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 3831-3840.   | 1.6 | 43        |
| 97  | SIZE DISTRIBUTIONS OF CHONDRULE TYPES IN THE INMAN AND ALLAN HILLS A77011 L3 CHONDRITES. <i>Meteoritics</i> , 1984, 19, 135-143.   | 1.5 | 42        |
| 98  | On the origin of shocked and unshocked CM clasts in H chondrite regolith breccias. <i>Meteoritics and Planetary Science</i> , 2009, 44, 701-724.   | 0.7 | 42        |
| 99  | Compositional and petrographic similarities of CV and CK chondrites: A single group with variations in textures and volatile concentrations attributable to impact heating, crushing and oxidation. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 108, 45-62. | 1.6 | 42        |
| 100 | Impact features of enstatite-rich meteorites. <i>Chemie Der Erde</i> , 2015, 75, 1-28.   | 0.8 | 42        |
| 101 | Relationships among intrinsic properties of ordinary chondrites: Oxidation state, bulk chemistry, oxygen-isotopic composition, petrologic type, and chondrule size. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4907-4918.                              | 1.6 | 41        |
| 102 | Clastic matrix in EH3 chondrites. <i>Meteoritics and Planetary Science</i> , 2009, 44, 589-601.  | 0.7 | 41        |
| 103 | Carbonaceous and noncarbonaceous iron meteorites: Differences in chemical, physical, and collective properties. <i>Meteoritics and Planetary Science</i> , 2018, 53, 2357-2371.  | 0.7 | 41        |
| 104 | Formation of Ureilites by Impact Melting of Carbonaceous Chondritic Material. <i>Meteoritics</i> , 1988, 23, 333-337.  | 1.5 | 39        |
| 105 | Glass-rich chondrules in ordinary chondrites. <i>Meteoritics</i> , 1994, 29, 697-707.  | 1.5 | 39        |
| 106 | Aluminian low-Ca pyroxene in a Ca-Al-rich chondrule from the Semarkona meteorite. <i>American Mineralogist</i> , 2004, 89, 867-872.  | 0.9 | 38        |
| 107 | Metal in CR chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2212-2230.  | 1.6 | 38        |
| 108 | R-chondrite bulk-chemical compositions and diverse oxides: Implications for parent-body processes. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 124, 131-151.  | 1.6 | 36        |

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|-----|--|------|-----------|
| 109 | First occurrence of pyrophanite (MnTiO <sub>3</sub> ) and baddeleyite (ZrO <sub>2</sub> ) in an ordinary chondrite. <i>Meteoritics</i> , 1993, 28, 232-239.  | 1.5  | 35        |
| 110 | Euhedral tetraenaite in the Jelica meteorite. <i>Mineralogical Magazine</i> , 1994, 58, 215-221.   | 0.6  | 35        |
| 111 | Siderophile-element anomalies in CK carbonaceous chondrites: Implications for parent-body aqueous alteration and terrestrial weathering of sulfides. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4019-4037. | 1.6  | 35        |
| 112 | Shock and annealing in the amphibole- and mica-bearing R chondrites. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1057-1075.   | 0.7  | 35        |
| 113 | Secondary melting events in Semarkona chondrules revealed by compositional zoning in low-Ca pyroxene. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 211, 256-279.   | 1.6  | 34        |
| 114 | Derivation of a heterogeneous lithic fragment in the Bovedy L-group chondrite from impact-melted porphyritic chondrules. <i>Geochimica Et Cosmochimica Acta</i> , 1981, 45, 2213-2228.                             | 1.6  | 33        |
| 115 | PHOSPHATE-SULFIDE ASSEMBLAGES AND Al/Ca RATIOS IN TYPE-3 CHONDRITES. <i>Meteoritics</i> , 1985, 20, 479-489  |      | 33        |
| 116 | Possible impact-induced refractory-lithophile fractionations in EL chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1523-1537.   | 1.6  | 33        |
| 117 | Variations in impact effects among IIIE iron meteorites. <i>Meteoritics and Planetary Science</i> , 2016, 51, 1611-1631.   | 0.7  | 33        |
| 118 | First known EL5 chondrite evidence for dual genetic sequence for enstatite chondrites. <i>Nature</i> , 1984, 308, 257-259.   | 13.7 | 32        |
| 119 | Wassonite: A new titanium monosulfide mineral in the Yamato 691 enstatite chondrite. <i>American Mineralogist</i> , 2012, 97, 807-815.   | 0.9  | 32        |
| 120 | Non-spherical lobate chondrules in CO3.0 Y-81020: General implications for the formation of low-FeO porphyritic chondrules in CO chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 211-220.           | 1.6  | 31        |
| 121 | Carbon-rich chondritic clast PV1 from the Plainview H-chondrite regolith breccia: Formation from H3 chondrite material by possible cometary impact. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 3419-3430.  | 1.6  | 31        |
| 122 | Petrography of refractory inclusions in CM2.6 QUE 97990 and the origin of melilite-free spinel inclusions in CM chondrites. <i>Meteoritics and Planetary Science</i> , 2007, 42, 1711-1726.                        | 0.7  | 31        |
| 123 | An amoeboid olivine inclusion (AOI) in CK-3 NWA 1559, comparison to AOI's in CV-3 Allende, and the origin of AOI's in CK- and CV- chondrites. <i>Meteoritics and Planetary Science</i> , 2013, 48, 432-444.        | 0.7  | 31        |
| 124 | Multiple melting in a four-layered barred olivine chondrule with compositionally heterogeneous glass from LL-3.0 Semarkona. <i>Meteoritics and Planetary Science</i> , 2013, 48, 445-456.                          | 0.7  | 31        |
| 125 | Formation and destruction of magnetite in CO3 chondrites and other chondrite groups. <i>Chemie Der Erde</i> , 2019, 79, 125528.  | 0.8  | 30        |
| 126 | Explicating the behavior of Mn-bearing phases during shock melting and crystallization of the Abee EH chondrite impact melt breccia. <i>Meteoritics and Planetary Science</i> , 2008, 43, 1481-1485.               | 0.7  | 29        |



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| 127 | What's up? Preservation of gravitational direction in the Larkman Nunatak 06299 LL impact melt breccia. <i>Meteoritics and Planetary Science</i> , 2011, 46, 737-747.                                   | 0.7 | 29        |
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