# Edward R D Scott

List of Publications by Year
in descending order



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|---|---|---|---|
| 124 papers | 7,757 citations | 34016 52 h-index | 54797 84 g-index |
| 125 all docs | 125 docs citations | 125 times ranked | 2763 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Cooling rates and impact histories of group IAB and other IAB complex iron meteorites inferred from zoned taenite and the cloudy zone. Meteoritics and Planetary Science, 2022, 57, 238-260. | 0.7 | 6 |
| 2 | Complementary nucleosynthetic isotope anomalies of Mo and W in chondrules and matrix in the Allende carbonaceous chondrite: The case for hydrothermal metamorphism and its implications. Meteoritics and Planetary Science, 2022, 57, 450-471. | 0.7 | 5 |
| 3 | Discovery and Implications of Hidden Atomic-Scale Structure in a Metallic Meteorite. Nano Letters, 2021, 21, 8135-8142. | 4.5 | 4 |
| 4 | David J. Barber (1935â€"2020). Meteoritics and Planetary Science, 2020, 55, 2794-2796. | 0.7 | 0 |
| 5 | Isotopic Dichotomy among Meteorites and Its Bearing on the Protoplanetary Disk. Astrophysical Journal, 2018, 854, 164. | 1.6 | 76 |
| 6 | ISOTOPIC DICHOTOMY AMONG METEORITES AND IMPLICATIONS FOR THE EVOLUTION OF THE PROTOPLANETARY DISK. Proceedings of the ... Lunar and Planetary Science Conference., 2018, 2018, . | 0.0 | 0 |
| 7 | NEBULAR HISTORY OF DIFFERENTIATED AND CHONDRITIC PLANETESIMALS. Meteoritics and Planetary Science, 2018, 81, 6168. | 0.7 | 0 |
| 8 | Ion microprobe analyses of carbon in Feâ€"Ni metal in iron meteorites and mesosiderites. Geochimica Et Cosmochimica Acta, 2017, 200, 367-407. | 1.6 | 23 |
| 9 | Origin of massâ€independent oxygen isotope variation among ureilites: Clues from chondrites and primitive achondrites. Meteoritics and Planetary Science, 2017, 52, 690-708. | 0.7 | 39 |
| 10 | Iron and Stony-iron Meteorites: Evidence for the Formation, Crystallization, and Early Impact Histories of Differentiated Planetesimals. , 2017, , 136-158. | | 5 |
| 11 | Joseph I. Goldstein (1939â€"2015). Meteoritics and Planetary Science, 2016, 51, 438-440. | 0.7 | 0 |
| 12 | Oxygen isotope and petrological study of silicate inclusions in IIE iron meteorites and their relationship with H chondrites. Geochimica Et Cosmochimica Acta, 2016, 173, 97-113. | 1.6 | 28 |
| 13 | Dating the Moon-forming impact event with asteroidal meteorites. Science, 2015, 348, 321-323. | 6.0 | 94 |
| 14 | Geochemistry and oxygen isotope composition of main-group pallasites and olivine-rich clasts in mesosiderites: Implications for the â€œGreat Dunite Shortageâ€• and HED-mesosiderite connection. Geochimica Et Cosmochimica Acta, 2015, 169, 115-136. | 1.6 | 48 |
| 15 | Thermal and impact history of the H chondrite parent asteroid during metamorphism: Constraints from metallic Feâ€"Ni. Geochimica Et Cosmochimica Acta, 2014, 136, 13-37. | 1.6 | 59 |
| 16 | Possible mechanism for explaining the origin and size distribution of Martian hematite spherules. Planetary and Space Science, 2014, 92, 16-23. | 0.9 | 13 |
| 17 | The oxygen isotope composition of diogenites: Evidence for early global melting on a single, compositionally diverse, HED parent body. Earth and Planetary Science Letters, 2014, 390, 165-174. | 1.8 | 50 |
| 18 | Thermal and collisional history of Tishomingo iron meteorite: More evidence for early disruption of differentiated planetesimals. Geochimica Et Cosmochimica Acta, 2014, 124, 34-53. | 1.6 | 32 |

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|---|---|---|---|
| 19 | Determining cooling rates of iron and stony-iron meteorites from measurements of Ni and Co at kamaciteâ€“taenite interfaces. Geochimica Et Cosmochimica Acta, 2014, 140, 297-320. | 1.6 | 42 |
| 20 | The pressures and temperatures of meteorite impact: Evidence from micro-Raman mapping of mineral phases in the strongly shocked Taiban ordinary chondrite. American Mineralogist, 2013, 98, 859-869. | 0.9 | 29 |
| 21 | <i>Handbook of Iron Meteorites</i> by Vagn F. Buchwald, 1975: Electronic edition. Meteoritics and Planetary Science, 2013, 48, 2608-2608. | 0.7 | 6 |
| 22 | Evidence for a Dynamo in the Main Group Pallasite Parent Body. Science, 2012, 338, 939-942. | 6.0 | 108 |
| 23 | The origin of chondrules and chondrites: Debris from lowâ€velocity impacts between molten planetesimals?. Meteoritics and Planetary Science, 2012, 47, 2170-2192. | 0.7 | 97 |
| 24 | Workshop on Formation of the First Solids in the Solar Systemâ€"Honoring Klaus Keil for his Distinguished Career in Meteoritics and Cosmochemistry. Meteoritics and Planetary Science, 2012, 47, 1889-1890. | 0.7 | 1 |
| 25 | ON THE EFFECT OF GIANT PLANETS ON THE SCATTERING OF PARENT BODIES OF IRON METEORITE FROM THE TERRESTRIAL PLANET REGION INTO THE ASTEROID BELT: A CONCEPT STUDY. Astrophysical Journal, 2012, 749, 113. | 1.6 | 27 |
| 26 | Thermal and impact histories of reheated group IVA, IVB, and ungrouped iron meteorites and their parent asteroids. Meteoritics and Planetary Science, 2011, 46, 1227-1252. | 0.7 | 31 |
| 27 | Impact histories of angrites, eucrites, and their parent bodies. Meteoritics and Planetary Science, 2011, 46, 1878-1887. | 0.7 | 29 |
| 28 | Meteorites: An Overview. Elements, 2011, 7, 47-48. | 0.5 | 7 |
| 29 | OXYGEN ISOTOPIC COMPOSITION OF THE SUN AND MEAN OXYGEN ISOTOPIC COMPOSITION OF THE PROTOSOLAR SILICATE DUST: EVIDENCE FROM REFRACTORY INCLUSIONS. Astrophysical Journal, 2010, 713, 1159-1166. | 1.6 | 84 |
| 30 | Thermal history and origin of the IVB iron meteorites and their parent body. Geochimica Et Cosmochimica Acta, 2010, 74, 4493-4506. | 1.6 | 42 |
| 31 | Main-group pallasites: Thermal history, relationship to IIIAB irons, and origin. Geochimica Et Cosmochimica Acta, 2010, 74, 4471-4492. | 1.6 | 99 |
| 32 | Thermal histories of IVA iron meteorites from transmission electron microscopy of the cloudy zone microstructure. Meteoritics and Planetary Science, 2009, 44, 343-358. | 0.7 | 35 |
| 33 | Implications of the carbonaceous chondrite Mnâ€“Cr isochron for the formation of early refractory planetesimals and chondrules. Geochimica Et Cosmochimica Acta, 2009, 73, 5137-5149. | 1.6 | 13 |
| 34 | Oxygen isotopic constraints on the origin and parent bodies of eucrites, diogenites, and howardites. Geochimica Et Cosmochimica Acta, 2009, 73, 5835-5853. | 1.6 | 148 |
| 35 | Metallographic cooling rates and origin of IVA iron meteorites. Geochimica Et Cosmochimica Acta, 2008, 72, 3043-3061. | 1.6 | 77 |
| 36 | Chondrites and the Protoplanetary Disk. Annual Review of Earth and Planetary Sciences, 2007, 35, 577-620. | 4.6 | 201 |

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|---|---|---|---|
| 37 | Iron meteorite evidence for early formation and catastrophic disruption of protoplanets. Nature, 2007, 446, 888-891. | 13.7 | 137 |
| 38 | Shock and thermal history of Martian meteorite Allan Hills 84001 from transmission electron microscopy. Meteoritics and Planetary Science, 2006, 41, 643-662. | 0.7 | 21 |
| 39 | Nature and Origins of Meteoritic Breccias. , 2006, , 679-712. | | 184 |
| 40 | Meteoritic and other constraints on the internal structure and impact history of small asteroids. Icarus, 2005, 174, 46-53. | 1.1 | 15 |
| 41 | Evolution of Oxygen Isotopic Composition in the Inner Solar Nebula. Astrophysical Journal, 2005, 622, 1333-1342. | 1.6 | 77 |
| 42 | Thermal Processing of Silicate Dust in the Solar Nebula: Clues from Primitive Chondrite Matrices. Astrophysical Journal, 2005, 623, 571-578. | 1.6 | 74 |
| 43 | Geochemistry of target rocks, impact-melt particles, and metallic spherules from Meteor Crater, Arizona: Empirical evidence on the impact process. , 2005, , . | | 9 |
| 44 | Remote Raman and laser-induced fluorescence (RLIF) emission instrument for detection of mineral, organic, and biogenic materials on Mars to 100 meters radial distance. , 2004, 5660, 128. | | 10 |
| 45 | Ureilitic breccias: clues to the petrologic structure and impact disruption of the ureilite parent asteroid. Chemie Der Erde, 2004, 64, 283-327. | 0.8 | 149 |
| 46 | A possible source for the Martian crustal magnetic field. Earth and Planetary Science Letters, 2004, 220, 83-90. | 1.8 | 37 |
| 47 | Transmission electron microscopy of minerals in the martian meteorite Allan Hills 84001. Meteoritics and Planetary Science, 2003, 38, 831-848. | 0.7 | 25 |
| 48 | Existence of an 16O-Rich Gaseous Reservoir in the Solar Nebula. Science, 2002, 295, 1051-1054. | 6.0 | 105 |
| 49 | Origin of supposedly biogenic magnetite in the Martian meteorite Allan Hills 84001. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6556-6561. | 3.3 | 91 |
| 50 | Meteorite Evidence for the Accretion and Collisional Evolution of Asteroids. , 2002, , 697-710. | | 20 |
| 51 | Oxygen isotopic compositions and origins of calciumâ€aluminumâ€rich inclusions and chondrules. Meteoritics and Planetary Science, 2001, 36, 1307-1319. | 0.7 | 26 |
| 52 | Formation of mesosiderites by fragmentation and reaccretion of a large differentiated asteroid. Meteoritics and Planetary Science, 2001, 36, 869-881. | 0.7 | 82 |
| 53 | Formation of feldspathic and metallic melts by shock in enstatite chondrite Reckling Peak A80259. Meteoritics and Planetary Science, 2000, 35, 319-329. | 0.7 | 41 |
| 54 | Origin of a unique impactâ€melt rockâ€"the Lâ€chondrite Ramsdorf. Meteoritics and Planetary Science, 1999, 34, 49-59. | 0.7 | 29 |

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| 55 | Mineralogy, petrography, bulk chemical, iodineâ€xenon, and oxygenâ€isotopic compositions of dark inclusions in the reduced CV3 chondrite Efremovka. Meteoritics and Planetary Science, 1999, 34, 67-89. | 0.7 | 60 |
| 56 | Comment on â€œPetrologic evidence for low-temperature, possibly flood-evaporitic origin of carbonates in the ALH84001 meteoriteâ€•by Paul H. Warren. Journal of Geophysical Research, 1999, 104, 24211-24215. | 3.3 | 6 |
| 57 | Origin of carbonate-magnetite-sulfide assemblages in Martian meteorite ALH84001. Journal of Geophysical Research, 1999, 104, 3803-3813. | 3.3 | 38 |
| 58 | Vibrational spectroscopic study of minerals in the Martian meteorite ALH 84001. American Mineralogist, 1999, 84, 1569-1576. | 0.9 | 76 |
| 59 | Secondary calciumâ€ironâ€rich minerals in the Baliâ€like and Allendeâ€like oxidized CV3 chondrites and Allende dark inclusions. Meteoritics and Planetary Science, 1998, 33, 623-645. | 0.7 | 95 |
| 60 | Carbonates in fractures of Martian meteorite Allan Hills 84001: Petrologic evidence for impact origin. Meteoritics and Planetary Science, 1998, 33, 709-719. | 0.7 | 50 |
| 61 | Progressive alteration in CV3 chondrites: More evidence for asteroidal alteration. Meteoritics and Planetary Science, 1998, 33, 1065-1085. | 0.7 | 272 |
| 62 | Carbide-magnetite assemblages in type-3 ordinary chondrites. Geochimica Et Cosmochimica Acta, 1997, 61, 219-237. | 1.6 | 133 |
| 63 | Shock metamorphism of enstatite chondrites. Geochimica Et Cosmochimica Acta, 1997, 61, 847-858. | 1.6 | 168 |
| 64 | Origin of fayalitic olivine rims and lathâ€shaped matrix olivine in the CV3 chondrite Allende and its dark inclusions. Meteoritics and Planetary Science, 1997, 32, 31-49. | 0.7 | 130 |
| 65 | Constraints on the role of impact heating and melting in asteroids. Meteoritics and Planetary Science, 1997, 32, 349-363. | 0.7 | 181 |
| 66 | Petrological evidence for shock melting of carbonates in the martian meteorite ALH84001. Nature, 1997, 387, 377-379. | 13.7 | 102 |
| 67 | Core crystallization and silicate-metal mixing in the parent body of the IVA iron and stony-iron meteorites. Geochimica Et Cosmochimica Acta, 1996, 60, 1615-1631. | 1.6 | 57 |
| 68 | Thermal and shock history of mesosiderites and their large parent asteroid. Geochimica Et Cosmochimica Acta, 1996, 60, 2609-2619. | 1.6 | 49 |
| 69 | Thermal histories of IVA stony-iron and iron meteorites: Evidence for asteroid fragmentation and reaccretion. Geochimica Et Cosmochimica Acta, 1996, 60, 3103-3113. | 1.6 | 48 |
| 70 | Meteoritic, Asteroidal, and Theoretical Constraints on the 500 Ma Disruption of theLChondrite Parent Body. Icarus, 1996, 119, 182-191. | 1.1 | 79 |
| 71 | Mineralogical and chemical modification of components in CV3 chondrites: Nebular or asteroidal processing?. Meteoritics, 1995, 30, 748-775. | 1.5 | 343 |
| 72 | Electrical Discharge Heating of Chondrules in the Solar Nebula. Icarus, 1995, 115, 97-108. | 1.1 | 19 |

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| 73 | Classification, metamorphic history, and pre-metamorphic composition of chondrules. Geochimica Et Cosmochimica Acta, 1994, 58, 1203-1209. | 1.6 | 28 |
| 74 | Origin of ureilite meteorites and implications for planetary accretion. Geophysical Research Letters, 1993, 20, 415-418. | 1.5 | 88 |
| 75 | Chemical fractionations in Group IIIAB iron meteorites: Origin by dendritic crystallization of an asteroidal core. Geochimica Et Cosmochimica Acta, 1993, 57, 3457-3472. | 1.6 | 65 |
| 76 | Asteroid Differentiation: Pyroclastic Volcanism to Magma Oceans. Meteoritics, 1993, 28, 34-52. | 1.5 | 96 |
| 77 | Genesis of the IIICD iron meteorites: Evidence from silicateâ€bearing inclusions. Meteoritics, 1993, 28, 552-560. | 1.5 | 42 |
| 78 | Asteroid core crystallization by inward dendritic growth. Journal of Geophysical Research, 1992, 97, 14727-14734. | 3.3 | 60 |
| 79 | Shock metamorphism of carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 1992, 56, 4281-4293. | 1.6 | 238 |
| 80 | Composition of chondrule silicates in LL3-5 chondrites and implications for their nebular history and parent body metamorphism. Geochimica Et Cosmochimica Acta, 1991, 55, 601-619. | 1.6 | 86 |
| 81 | Disentangling nebular and asteroidal features of c03 carbonaceous chondrite meteorites. Geochimica Et Cosmochimica Acta, 1990, 54, 2485-2502. | 1.6 | 159 |
| 82 | Chemical, isotopic and mineralogical evidence for the origin of matrix in ordinary chondrites. Geochimica Et Cosmochimica Acta, 1989, 53, 2081-2093. | 1.6 | 56 |
| 83 | Planetary Compositions - Clues from Meteorites and Asteroids. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1989, 44, 924-934. | 0.7 | 8 |
| 84 | A new kind of primitive chondrite, Allan Hills 85085. Earth and Planetary Science Letters, 1988, 91, 1-18. | 1.8 | 107 |
| 85 | NAZARETH METEORITES: CLASSIFICATION AND NOMENCLATURE. Meteoritics, 1987, 22, 173-177. | 1.5 | 1 |
| 86 | Original structures, and fragmentation and reassembly histories of asteroids: Evidence from meteorites. Icarus, 1987, 69, 1-13. | 1.1 | 156 |
| 87 | Accretion, metamorphism, and brecciation of ordinary chondrites: Evidence from petrologic studies of meteorites from Roosevelt County, New Mexico. Journal of Geophysical Research, 1986, 91, E115. | 3.3 | 52 |
| 88 | Ubiquitous brecciation after metamorphism in equilibrated ordinary chondrites. Journal of Geophysical Research, 1985, 90, 137-148. | 3.3 | 28 |
| 89 | Petrology of types 4â€"6 carbonaceous chondrites. Journal of Geophysical Research, 1985, 90, C699. | 3.3 | 18 |
| 90 | Meteorology: Origins of stony-iron meteorites. Nature, 1984, 311, 708-708. | 13.7 | 0 |

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| 91 | Relict and other anomalous grains in chondrules: Implications for chondrule formation. Journal of Geophysical Research, 1984, 89, B559. | 3.3 | 38 |
| 92 | Composition and origin of enstatite in E chondrites. Journal of Geophysical Research, 1984, 89, B567. | 3.3 | 18 |
| 93 | Matrix material in type 3 chondrites?occurrence, heterogeneity and relationship with chondrules. Geochimica Et Cosmochimica Acta, 1984, 48, 1741-1757. | 1.6 | 99 |
| 94 | Meteoritics: Iron meteorites and the nature of asteroidal cores. Nature, 1983, 304, 216-217. | 13.7 | 2 |
| 95 | Chondrules and other components in C, O, and E chondrites: Similarities in their properties and origins. Journal of Geophysical Research, 1983, 88, B275. | 3.3 | 107 |
| 96 | Nature of the H chondrite parent body regolith: Evidence from the Dimmitt breccia. Journal of Geophysical Research, 1983, 88, A741. | 3.3 | 51 |
| 97 | A NEW LL3 CHONDRITE, ALLAN HILLS A79003, AND OBSERVATIONS ON MATRICES IN ORDINARY CHONDRITES. Meteoritics, 1982, 17, 65-75. | 1.5 | 24 |
| 98 | Origin of rapidly solidified metal-troilite grains in chondrites and iron meteorites. Geochimica Et Cosmochimica Acta, 1982, 46, 813-823. | 1.6 | 128 |
| 99 | Microchondrule-bearing clast in the Piancaldoli LL3 meteorite: a new kind of type 3 chondrite and its relevance to the history of chondrules. Geochimica Et Cosmochimica Acta, 1982, 46, 1763-1776. | 1.6 | 92 |
| 100 | Isotopic anomalies in meteorites. Nature, 1982, 297, 361-362. | 13.7 | 1 |
| 101 | New kind of type 3 chondrite with a graphite-magnetite matrix. Earth and Planetary Science Letters, 1981, 56, 19-31. | 1.8 | 54 |
| 102 | Polycrystalline taenite and metallographic cooling rates of chondrites: reply to comments of A. W. R. Bevan and H. J. Axon (1981). Geochimica Et Cosmochimica Acta, 1981, 45, 1959. | 1.6 | 4 |
| 103 | Metallic minerals, thermal histories and parent bodies of some xenolithic, ordinary chondrite meteorites. Geochimica Et Cosmochimica Acta, 1981, 45, 53-67. | 1.6 | 124 |
| 104 | Graphiteâ€"magnetite aggregates in ordinary chondritic meteorites. Nature, 1981, 291, 544-546. | 13.7 | 67 |
| 105 | Ordering of FeNi in clear taenite from meteorites. Nature, 1980, 287, 255-255. | 13.7 | 5 |
| 106 | Origin of anomalous iron meteorites. Mineralogical Magazine, 1979, 43, 415-421. | 0.6 | 23 |
| 107 | Identification of clear taenite in meteorites as ordered FeNi. Nature, 1979, 281, 360-362. | 13.7 | 29 |
| 108 | Primary fractionation of elements among iron meteorites. Geochimica Et Cosmochimica Acta, 1978, 42, 1447-1458. | 1.6 | 19 |

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| 109 | Iron meteorites with low Ga and Ge concentrationsâ€"composition, structure and genetic relationships. Geochimica Et Cosmochimica Acta, 1978, 42, 1243-1251. | 1.6 | 26 |
| 110 | Tungsten in iron meteorites. Earth and Planetary Science Letters, 1978, 39, 363-370. | 1.8 | 17 |
| 111 | FOUR NEW IRON METEORITE FINDS. Meteoritics, 1977, 12, 425-436. | 1.5 | 8 |
| 112 | Composition, mineralogy and origin of group IC iron meteorites. Earth and Planetary Science Letters, 1977, 37, 273-284. | 1.8 | 27 |
| 113 | Formation of olivine-metal textures in pallasite meteorites. Geochimica Et Cosmochimica Acta, 1977, 41, 693-710. | 1.6 | 79 |
| 114 | Pallasitesâ€"metal composition, classification and relationships with iron meteorites. Geochimica Et Cosmochimica Acta, 1977, 41, 349-360. | 1.6 | 99 |
| 115 | 4. Parent Bodies of Iron Meteorites. International Astronomical Union Colloquium, 1977, 39, 439-444. | 0.1 | 2 |
| 116 | Geochemical relationships between some pallasites and iron meteorites. Mineralogical Magazine, 1977, 41, 265-272. | 0.6 | 66 |
| 117 | Chemical classification of iron meteoritesâ€"VIII. Groups IC. IIE, IIIF and 97 other irons. Geochimica Et Cosmochimica Acta, 1976, 40, 103-115. | 1.6 | 130 |
| 118 | Classification and properties of iron meteorites. Reviews of Geophysics, 1975, 13, 527-546. | 9.0 | 262 |
| 119 | Structure and formation of the San Cristobal meteorite, other IB irons and group IIICD. Geochimica Et Cosmochimica Acta, 1974, 38, 1379-1391. | 1.6 | 42 |
| 120 | The nature of dark-etching rims in meteoritic taenite. Geochimica Et Cosmochimica Acta, 1973, 37, 2283-2294. | 1.6 | 48 |
| 121 | The chemical classification of iron meteoritesâ€"VII. A reinvestigation of irons with Ge concentrations between 25 and 80 ppm. Geochimica Et Cosmochimica Acta, 1973, 37, 1957-1983. | 1.6 | 125 |
| 122 | New Carbide, (Fe,Ni)23C6, found in Iron Meteorites. Nature: Physical Science, 1971, 229, 61-62. | 0.8 | 18 |
| 123 | First Nitride (CrN) in Iron Meteorites. Nature: Physical Science, 1971, 233, 113-114. | 0.8 | 31 |
| 124 | Making Chondrules by Splashing Molten Planetesimals. , 0, , 361-374. | | 8 |