Publications – Addi Bischoff

(complete list)

2023

Peterson L. D., Newcombe M. E., Alexander C. M. O'D., Wang J., Sarafian A. R., Bischoff A., and Nielsen S. G.: The H_2O content of the ureilite parent body. Geochim. Cosmochim. Acta 340, 141-157 (2023); https://doi.org/10.1016/j.gca.2022.10.036

Zhu K., Schiller M., Moynier F., Groen M., Alexander C. M.O'D., Davidson J., Schrader D. L., Bischoff A., Bizzarro M.: Chondrite diversity revealed by chromium, calcium and magnesium isotopes. Geochim. Cosmochim. Acta 342, 156-168 (2023); doi.org/10.1016/j.gca.2022.12.014

2022

615. Bischoff A., Patzek M., Peters S. T. M., Barrat J.-A., Di Rocco T., Pack A., Ebert S., Jansen C. A., and Kmieciak K.: The chondrite breccia of Antonin (L4-5) – a new meteorite fall from Poland with a heterogeneous distribution of metal. Meteoritics & Planetary Science 57, 2127–2142 (2022); DOI:10.1111/maps.13905.

614. Bischoff A., Bannemann L., Decker S., Ebert S., Haberer S., Heitmann U., Horstmann M., Klemm K. I., Kraemer A.-K., Lentfort S., Patzek M., Storz J., and Weyrauch M.: Asteroid 2008 TC_3, not a polymict ureilitic but a polymict C1 chondrite parent body? - Survey of 249 Almahata Sitta fragments. Meteoritics & Planetary Science 57, 1339–1364 (2022); DOI: 10.1111/maps.13821.

613. Bischoff A., Storz J., Barrat J.-A., Heinlein D., Jull A. J. T., Merchel S., Pack A., and Rugel G.: Blaubeuren, Cloppenburg, and Machtenstein - three recently recognized H-group chondrite finds in Germany with distinct terrestrial ages and weathering effects. Meteoritics & Planetary Science 57, 136-153 (2022). DOI: 10.1111/maps.13779.

612. Ebert S., Nagashima K., Bischoff A., Berndt J., Krot A. N.: Mineralogy, petrology, and oxygen isotopic compositions of aluminum-rich chondrules from unequilibrated ordinary and the Dar al Gani 083 (CO3.1) chondrite. Geochimica et Cosmochimica Acta 336: 448–468 (2022). doi: 10.1016/j.gca.2022.08.026

611. Ebert S., Nagashima K., Bischoff A., Berndt J., and Krot A. N.: Al-rich chondrules from unequilibrated ordinary and CO carbonaceous chondrites: Evidence for ^{16}O-enriched refractory precursors. Meteoritics & Planetary Science 57, abstract #6010 (2022).

610. Ebert S., Nagashima K., Krot A. N., Patzek M., and Bischoff A.: A well-rounded Zn-rich HAL-like CAI: Evidences for formation under variable redox conditions in a nebular gas with variable O-isotopic composition. Meteoritics & Planetary Science 57, abstract #6009 (2022).

609. Goodrich C. A., Collinet M., Treiman A., Prissel T. C., Patzek M., Ebert S., Jercinovic M. J., Bischoff A., Pack A., Barrat J.-A., and Decker S.: The first main-group ureilite with

primary plagioclase: A missing link in the differentiation of the ureilite parent body. Meteoritics & Planetary Science 57, 1589–1616 (2022); DOI: 10.1111/maps.13889.

608. Kerraouch I., Kebukawa Y., Bischoff A., Zolensky M. E., Wölfer E., Hellmann J. L., Ito M., Patzek M., Trieloff M., Ludwig T., Barrat J.-A., Schmitt-Kopplin P., King A., Fockenberg T., Marrocchi Y., Fries M., Mathurin J., Dartois E., Duprat J., Engrand C., Deniset A., Dazzi A., Kiryu K., Igisu M., Shibuya T., Wakabayashi D., Yamashita S., Takeichi Y., Takahashi Y., Ohigashi T., Kodama Y., and Kondo M.: Heterogeneous nature of the carbonaceous chondrite breccia Aguas Zarcas – cosmochemical characterization and origin of new carbonaceous chondrite lithologies. Geochimica et Cosmochimica Acta 334, 155-186 (2022). https://doi.org/10.1016/j.gca.2022.07.010

607. Kerraouch I., Bischoff A., Zolensky M. E., Trieloff T., Krot. A. N., Nagashima K., Vollmer C., Patzek M., Ebert S., Radić D., Treiman A. and Rubin A. E.: Discovery of hydrated clasts with very high abundance of ferromagnesian ^{16}O-rich olivine: Inner or outer solar system origin? Meteoritics & Planetary Science 57, abstract #6246 (2022).

606. Murphy K. T., Morino P., Fehr M. A., Alosius R. M. L., Rüfenacht M., Bischoff A., and Schönbächler M.: Titanium and chromium nucleosynthetic isotope variations in the samples from the Almahata Sitta Strewnfield. Meteoritics & Planetary Science 57, abstract #6416 (2022).

605. Peterson L. D., Newcombe M. E., Nielsen S. G., Alexander C. M. O'D., Wang J., Sarafian A. R., and Bischoff A. 2022. The H_2O content of the ALM-A ureilitic trachyandesite. 53rd Lunar Planet. Science Conference, Houston. CD-ROM.

604. Riebe M. E. I., Plant A., Meier M.M.M., Will P., Krämer A.-K., Bischoff A., Maden C., and Busemann H.: Almahata Siia ureilites: Noble gases and cosmic ray exposure ages. Meteoritics & Planetary Science 57, abstract #6258 (2022).

603. Shollenberger Q. R., Render J., Jordan M. K., McCain K. A., Ebert S., Bischoff A., Kleine T., and Young E. D.: Titanium isotope systematics of refractory inclusions: Echoes of molecular cloud heterogeneity. Geochim. Cosmochim. Acta 324, 44-65 (2022). https://doi.org/10.1016/j.gca.2022.03.001

602. Storz J., Rout S. S., Bischoff A., and John T.: The processing of graphite in ureilites obeserved by Raman spectroscopy. Meteoritics & Planetary Science 57, abstract #6209 (2022).

601. Wombacher F., Kerraouch I., and Bischoff A.: Composition and petrography of recent Type 1 and 2 carbonaceous chondrite falls. Meteoritics & Planetary Science 57, abstract #6219 (2022).

600. Wombacher F., Kerraouch I., and Bischoff A.: Chemical composition and petrography of recent type 1 and 2 carbonaceous chondrite falls (abstract #335). GeoMinKöln (2022).

2021

599. Bischoff A., Alexander C. M. O'D., Barrat J.-A., Burkhardt C., Busemann H., Degering D., Di Rocco T., Fischer M., Fockenberg T., Foustoukos D. I., Gattacceca J., Godinho J. R. A., Harries D., Heinlein D., Hellmann J. L., Hertkorn N., Holm A., Jull A. J. T., Kerraouch I.,

King A. J., Kleine T., Koll D., Lachner J., Ludwig T., Merchel S., Mertens C. A. K., Morino P., Neumann W., Pack A., Patzek M., Pavetich S., Reitze M. P., Rüfenacht M., Rugel G., Schmidt C., Schmitt-Kopplin P., Schönbächler M., Trieloff M., Wallner A., Wimmer K., and Wölfer E.: The old, unique C1 chondrite Flensburg – Insight into the first processes of aqueous alteration, brecciation, and the diversity of water-bearing parent bodies and lithologies. Geochim. Cosmochim. Acta. 293, 142–186 (2021) doi.org/10.1016/j.gca.2020.10.014.

598. Kerraouch I., Bischoff A., Zolensky M. E., Pack A., Patzek M., Hanna R. D., Fries M. D., Harries D., Kebukawa Y., Le L., Ito M., and Rahman Z.: The polymict carbonaceous breccia Aguas Zarcas: A potential analogue to samples being returned by the OSIRIS-REx and Hayabusa2 missions. Meteoritics & Planetary Science 56, 277–310 (2021). DOI: 10.1111/maps.13620.

597. Kerraouch I., Bischoff A., Zolensky M. E., Pack A., Hanna R. D., Kebukawa Y., and Schmitt-Kopplin P.: The Aguas Zarcas breccia - similarities to surface features of asteroids Ryugu and Bennu. Goldschmidt-abstract (2021).

596. Kerraouch I., Bischoff A., Zolensky M. E., Pack A., Patzek M., and Trieloff M.: A unique chondrite clast in the NWA 13262 (L3 breccia) bearing similarities to carbonaceous and ordinary chondrites. Meteoritics & Planetary Science 56, #6197 (2021).

595. Kerraouch I., Bischoff A., Zolensky M. E., Hellmann J. L., Wölfer E., King A., Patzek M., Marrocchi Y., Pack A., Ludwig T., and Trieloff M.: The metal-rich lithology within the Aguas Zarcas breccia: Characterization, origin, and evolution. Meteoritics & Planetary Science 56, #6201 (2021).

594. Lentfort S., Bischoff A., Ebert S., and Patzek M.: Classification of CM chondrite breccias – implications for the evaluation of samples from the OSIRIS-REx and Hayabusa2 missions. Meteoritics & Planetary Science 56, 127-147 (2021). DOI: 10.1111/MAPS.13486

593. Patzek M., Bischoff A., Ludwig T., Whitehouse M., Trieloff M., Visser R., and John T.: O-isotope signatures of olivine and pyroxene grains in C1 and CM-like clasts. Meteoritics & Planetary Science 56, #6096 (2021).

592. Shollenberger Q. R., Render J., Jordan M. K., McCain K. A., Ebert S., Kohl I. E., Bischoff A., Kleine T., and Young E. D.: Titanium isotope systematics of refractory inclusions: Echos of molecular cloud heterogeneity (#2316). 52nd Lunar and Planetary Science Conference, Woodlands, Texas (2021).

591. Storz J., Ludwig T., Bischoff A., Schwarz W. H., and Trieloff M.: Graphite in ureilites, enstatite chondrites, and unique clasts in ordinary chondrites – Insights from the carbon-isotope composition. Geochim. Cosmochim. Acta 307, 86–104 (2021). https://doi.org/10.1016/j.gca.2021.05.028.

590. Storz J., Ludwig T., Bischoff A., Schwarz W. H., and Trieloff M.: Carbon isotope analyses of graphite in enstatite chondrites and ureilites (#1995). 52nd Lunar and Planetary Science Conference, Woodlands, Texas (2021).

589. Storz J., Bischoff A., and John T.: Distribution and chemistry of Fe-Ni metal in lunar regolith breccias. Paneth-Kolloquium 2021. https://paneth.eu/PanethKolloquium/2021/0033.pdf

588. Vernazza P., P. Beck, O. Ruesch, A. Bischoff, L. Bonal,· G. Brennecka, R. Brunetto, H. Busemann, J. Carter, C. Carli, C. Cartier, M. Ciarniello,·V. Debaille, A. Delsanti, L.

D'Hendecourt, E. Füri, O. Groussin, A. Guilbert-Lepoutre, J. Helbert, P. Hoppe, E. Jehin, L. Jorda, A. King, T. Kleine, P. Lamy, J. Lasue, C. Le Guillou, H. Leroux, I. Leya, T. Magna, Y. Marrocchi, A. Morlok, O. Mousis, E. Palomba, L. Piani, E. Quirico, L. Remusat, M. Roskosz, M. Rubin, S. Russell, M. Schönbächler, N. Thomas, J. Villeneuve, V. Vinogradoff, P. Wurz, and B. Zanda; Sample return of primitive matter from the outer Solar System. Experimental Astronomy (2021) https://doi.org/10.1007/s10686-021-09811-y.

587. Zhu K., Moynier F., Schiller M., Alexander C. M. O'D., Barrat J.-A., Bischoff A., and Bizzarro M.: Mass-independent and mass-dependent Cr isotopic composition of the Rumuruti (R) chondrites: Implications for their origin and planet formation. Geochim. Cosmochim. Acta 293, 598-609 (2021)¸ https://doi.org/10.1016/j.gca.2020.10.007

586. Zhu K., Moynier F., Schiller M., Alexander C. M. O'D., Davidson J., Schrader D. L., Barrat J.-A., Bischoff A., van Kooten E., and M. Bizzarro M.: Mass-independent chromium isotopic panorama in chondrites: Implications for origin of chondrite parent bodies and early terrestrial depletion (#2131). 52nd Lunar and Planetary Science Conference, Woodlands, Texas (2021).

2020

585. Ebert S., Nagashima K., Krot A. N., and Bischoff A.: Oxygen-isotope heterogeneity in the Northwest Africa 3358 (H3.1) refractory inclusions – Fluid-assisted isotopic exchange on the H-chondrite parent body. Geochim. Cosmochim. Acta. 282, 98-112 (2020).

584. Harries D. and Bischoff A.: Petrological evidence for the existence and disruption of a 500 km-sized differentiated planetesimal of enstatite-chondritic parentage. Earth Planetary Science Letters 548, 116506 (2020). https://doi.org/10.1016/j.epsl.2020.116506.

583. Kerraouch I., Bischoff A., Zolensky M.E., Pack A., Patzek M., Wölfer E., Burkhardt C., and Fries M.: Characteristics of a new carbonaceous, metal-rich lithology found in the carbonaceous chondrite breccia Aguas Zarcas. 51st Lunar and Planetary Science Conference, Woodlands, Texas (2020).

582. Lunning N.G., Bischoff A., Gross J., Patzek M., Corrigan C. M., and McCoy T. J.: Insights into the formation of silica-rich achondrites from impact melts in Rumuruti-type chondrites. Meteoritics & Planetary Science 55, 130-148, Article DOI: 10.1111/maps.13430 (2020).

581. Ma C., Krot A. N., Beckett J. R., Nagashima K., Tschauner O., Rossman G. R., Simon S. B., and Bischoff A.: Warkite, $Ca_2Sc_6Al_6O_{20}$, a new mineral in carbonaceous chondrites and a key-stone phase in ultra-refractory inclusions from the solar nebula. Geochim. Cosmochim. Acta 277, 52-86 (2020). doi.org/10.1016/j.gca.2020.03.002

580. Morlok M., Weber I., Stojic A. N., Sohn M., Bischoff A., Martin D., Hiesinger H., and Helbert J.: Mid-infrerad reflectance spectroscopy of aubrite components. Meteoritics & Planetary Science 55, 2080–2096 (DOI: 10.1111/maps.13568; 2020).

579. Patzek M., Hoppe P., Bischoff A., Visser R., and John T.: Hydrogen isotopic composition of CI- and CM-like clasts from meteorite breccias – Sampling unknown sources of carbonaceous chondrite material. Geochim. Cosmochim. Acta 272, 177-197. doi:10.1016/j.gca.2019.12.017 (2020).

578. Rout S. S., Storz J., Bischoff A., and Ritter M.: Transmission electron microscope (TEM) study of graphite and diamond in ureilites. Abstact EMC 2020, Copenhagen (2020).

577. Visser R., John T., Whitehouse M. J., Patzek M, and Bischoff A.: A short-lived ^{26}Al induced hydrothermal alteration event in the outer solar system: Constraints from Mn/Cr ages of carbonates. Earth Planetary Science Letters 547, 116440 (2020).

576. Vollmer C., Leitner J., Kepaptsoglou D., Ramasse Q. M., King A. J., Schofield P. F., Bischoff A., Araki T., and Hoppe P.: A primordial ^{15}N-depleted organic component detected within the carbonaceous chondrite Maribo. Scientific Reports 10:20251 (2020) doi.org/10.1038/s41598-020-77190-z

575. Wombacher. F., Braukmüller N., Kaufmann L., Abouchami W., Münker C., and Bischoff A.: Analyses of extraterrestrial samples using quadrupole ICP-MS. Goldschmidt-abstract (2020).

2019

574. Bischoff A., Schleiting M., and Patzek M.: Shock stage distribution of 2280 ordinary chondrites – Can bulk chondrites with a shock stage S6 exist as individual rocks? Meteoritics & Planetary Science 54, 2189-2202 (2019) doi: 10.1111/maps.13208.

573. Bischoff A., Barrat J.-A., Berndt J., Borovicka J., Burkhardt C., Busemann H., Hakenmüller J., Heinlein D., Hertzog J., Kaiser J., Maden C., Meier M. M. M., Morino P., Pack A., Patzek M., Reitze M. P., Rüfenacht M., Schmitt-Kopplin P., Schönbächler M., Spurny P., Weber I., Wimmer K., and Zikmund T.: The Renchen L5-6 chondrite breccia – the first confirmed meteorite fall from Baden-Württemberg (Germany). Geochemistry – Chemie der Erde 79, 125525; https://doi.org/10.1016/j.chemer.2019.07.007 (2019).

572. Bischoff A., Lentfort S., Moehlmann K., Klemm K., and Haberer S.: Mineralogical characteristics of 20 new samples from the Almahata Sitta strewnfield. Meteoritics & Planetary Science 54, #6030 (2019).

571. Alfing J., Patzek M., and Bischoff A.: Modal abundances of coarse-grained (>5 µm) components within CI-chondrites and their individual clasts – mixing of various lithologies on the CI parent body(ies). Geochemistry – Chemie der Erde 79, 125532; https://doi.org/10.1016/j.chemer.2019.08.004 (2019).

570. Alfing J., Patzek M., and Bischoff A.: Modal abundances of coarse-grained (>5 µm) components within CI-chondrites and their individual clasts. Abstract #467, GeoMünster 2019 (2019).

569. Alfing J., Patzek M., and Bischoff A.: Modal abundances of coarse-grained components within CI-chondrites and their individual clasts. Paneth Kolloquium, Nördlingen (Germany), abstract URL:http://www.paneth.eu/PanethKolloquium/2019/0044.pdf (abstract #0044); (2019).

568. Barnes J. J., Goodrich C. A., McCubbin F. M., Bischoff A., Decker S., and Boyce J. W.: Non-chondritic volatile signatures in a ureilite trachyandesite (abstract #1875). 50th Lunar and Planetary Science Conference, Woodlands, Texas (2019).

567. Brugier Y.-A., Barrat J.-A., Gueguen B., Agranier A., Yamaguchi A., and Bischoff A.: Zinc isotopic variations in ureilites. Geochim. Cosmochim. Acta 246, 450-460 (2019).

566. Ebert S., Patzek M., Lentfort S., and Bischoff A.: Accretion of differentiated achondritic and aqueously-altered chondritic materials in the Early Solar System - significance of an igneous fragment in the CM chondrite NWA 12651. Meteoritics & Planetary Science 54, 2985–2995 (2019) DOI: 10.1111/maps.13407.

565. Ebert S., Bischoff A., Harries D., Lentfort S., Barrat J.-A., Pack A., Gattacceca J., Visser R., Schmid-Beurmann P., and Kimpel S.: Northwest Africa 11024 – a heated and dehydrated unique carbonaceous (CM) chondrite. Meteoritics & Planetary Science 54, 328-356 (2019). doi: 10.1111/maps.13212.

564. Ebert S., Patzek M., Shollenberger Q. R., Bischoff A., and Brennecka G. A.: Rare earth elements and O-Al-Mg isotope systematics from a >200 µm corundum grain in a CAI of the CK3 chondrite NWA 4964. Meteoritics & Planetary Science 54, #6018 (2019).

563. Haack H., Sørensen A. N., Bischoff A., Patzek M., Barrat J.-A., Midtskoge S., Stempel E., Laubenstein M., Greenwood, Schmitt-Kopplin R. P, Busemann H., Maden C., Bauer K., Schönbächler M., and Dahl-Jensen T.: Ejby - a new H5/6 ordinary chondrite fall in Copenhagen, Denmark. Meteoritics & Planetary Science 54, 1853-1869 (2019). https://doi.org/10.1111/maps.13344

562. Harries D, and Bischoff A.: A >500 km-sized Differentiated Planetesimal of Enstatite-chondritic Parentage. Paneth Kolloquium, Nördlingen (Germany), abstract URL: http://www.paneth.eu/PanethKolloquium/2019/0061.pdf (abstract #0061); (2019).

561. Kerraouch I., Ebert S., Patzek M., Bischoff A., Zolensky M. E., Pack A., Schmitt-Kopplin P., Belhai D., Bendaoud A., and Le L.: A light, chondritic xenolith in the Murchison (CM) chondrite – formation by fluid-assisted percolation during metasomatism? Geochemistry - Chemie der Erde 79, 125518; https://doi.org/10.1016/j.chemer.2019.06.002 (2019).

560. Kerraouch I., Bischoff A., Zolensky M. E., Ebert S., Patzek M., Pack A., Schmitt-Kopplin P., Belhai D., Bendaoud A., and Le L.: A chondritic xenolith in the Murchison (CM2) chondrite formed by fluid-assisted percolation during metasomatism. Meteoritics & Planetary Science 54, #6197 (2019).

559. Kerraouch I., Bischoff A., Zolensky M. E., Ebert S., Patzek M., Pack A., and Schmitt-Kopplin P.: A xenolith in the Murchison CM chondrite formed by fluid-assisted percolation during metasomatism (CM6?). Paneth Kolloquium, Nördlingen (Germany), abstract URL:http://www.paneth.eu/PanethKolloquium/2019/0053.pdf (abstract #0053) (2019).

558. Krot A. N., Ma C., Nagashima K., Davis A. M., Beckett J. R., Simon S. B., Komatsu M., Fagan T. J., Brenker F., Ivanova M. A., and Bischoff A.: Mineralogy, petrography, and oxygen isotopic compositions of ultrarefractory inclusions from carbonaceous chondrites. Geochemistry-Chemie der Erde 79, 125519; https://doi.org/10.1016/j.chemer.2019.07.001 (2019).

557. Lentfort S., Bischoff A., and Ebert S.: Classification of 13 CM chondrite breccias and CM clasts in two achondrites. Meteoritics & Planetary Science 54, #6029 (2019).

556. Lentfort S., Bischoff A., and Ebert S.: Classification of 13 CM chondrite breccias. Abstract #479, GeoMünster 2019 (2019).

555. Patzek M., Bischoff A., Hoppe P., Pack A., Visser R., and John T.: Oxygen and hydrogen isotopic evidence for the existence of several C1 parent bodies in the early solar system (abstract #1779). 50th Lunar and Planetary Science Conference, Woodlands, Texas (2019).

554. Patzek M., Kadlag Y., Bischoff A., Visser R., Becker H., and John T.: Chromium isotopes and trace element concentration of xenolithic C1 clasts in brecciated chondrites and achondrites. Meteoritics & Planetary Science 54, #6027 (2019).

553. Patzek M., Kadlag Y., Bischoff A., Visser R., Becker H., and John T.: Xenolithic C1 clasts and their relation to the host rocks revealed by chromium isotopes and trace element concentrations. Abstract #552, GeoMünster 2019 (2019).

552. Patzek M., Kadlag Y., Bischoff A., Visser R., Becker H., and John T.: Assessing different types of CI material by H, O, and Cr isotope systematics. Paneth Kolloquium, Nördlingen (Germany), abstract URL:http://www.paneth.eu/PanethKolloquium/2019/0045.pdf (abstract #0045); (2019).

551. Roszjar J., Whitehouse M. J., Terada K., Fukuda K., John T., Bischoff A., Morihita Y., and Hiyagon H.: Chemical, microstructural and chronological record of phosphates in the Ksar Ghilane 002 enriched shergottite. Geochim. Cosmochim. Acta. 245, 385-405 (2019).

550. Storz J., Bischoff A., Patzek M., Rout S. S., Ludwig T., and Trieloff M.: Graphite in meteorites – occurrence, abundance and origin. Abstract #455, GeoMünster 2019 (2019).

549. Visser R., John T., Patzek M., Bischoff A., Whitehouse M.J.: Sulfur isotope study of sulfides in CI, CM, C2ung chondrites and volatile-rich clasts – Evidence for different generations and reservoirs of sulfide formation. Geochim. Cosmochim. Acta 261, 210-223 (2019).

548. Visser R., John T., Patzek M., Bischoff A., and Whitehouse M. J.: Manganese-chromium ages of carbonates in aqueously-altered carbonaceous chondrites and clasts. Meteoritics & Planetary Science 54, #6172 (2019).

547. Visser R., John T., Patzek M., Bischoff A., and Whitehouse M. J.: Hydrothermal alteration in the outer solar System. Paneth Kolloquium, Nördlingen (Germany), abstract URL:http://www.paneth.eu/PanethKolloquium/2019/0029.pdf (abstract #0029; 2019)

2018

546. Bischoff A., Schleiting M., Wieler R., and Patzek M.: Brecciation among 2280 ordinary chondrites – constraints on the evolution of their parent bodies. *Geochim. Cosmochim. Acta* 238, 516-541 (2018).

545. Bischoff A., Kraemer A.-K., Klemm K. I., Decker S.: News from the Almahata Sitta strewn field - seven new samples: Three ureilites, three Enstatite chondrites, and one ordinary chondrite (abstract #6108). *Meteoritics & Planetary Science* 53, 6108, A25 (2018).

544. Bischoff A., Patzek M., Ebert S., Pack A., Kerraouch I., and Zolensky M. E.: A large, light fragment in the Murchison (CM) breccia - a unique, highly-metamorphosed chondrite as a

xenolith in a CM chondrite (abstract #6217). *Meteoritics & Planetary Science* **53**, 6217 (2018).

543. Ebert S., Patzek M., and A. Bischoff A.: A remarkable and well-rounded Zn-CAI in the CO3 chondrite Dar al Gani 083 (abstract #6232). *Meteoritics & Planetary Science* 53, 6232 (2018).

542. Ebert S., Patzek M., and A. Bischoff A.: Xenolithic fragment in the CM chondrite Mukundpura: Greetings from the Tucson parent body? (abstract #6246). *Meteoritics & Planetary Science* 53, 6246 (2018).

541. Ebert S., Render J., Brennecka G.A., Burkhardt C., Bischoff A., Gerber S., and Kleine T.: Ti isotopic evidence for a non-CAI refractory component in the inner Solar System. *Earth and Planetary Science Letters* 398, 257-265 (2018).

540. Kerraouch I., Zolensky M. E., Bischoff A., Le L., Belhaï D., Patzek M., Ebert S.: Mineralogical study of a white clast from Murchison (CM2): comparison with R-chondrites (abstract #6363). *Meteoritics & Planetary Science* 53, 6363 (2018).

539. Krot A. N., Nagashima K., Ma C., Simon S., Davis A., Komatsu M., Fagan T., Ivanova M., Bischoff A., and Brenker F.: Ultrarefractory inclusions in carbonaceous chondrites. Solar-System Symposium, Hokkaido, Japan (2018).

538. Krot A. N., Ma C., Nagashima K., Davis A. M., Beckett J. R., Simon S. B., Komatsu M., Fagan T. J., Brenker F., Ivanova M. A., and Bischoff A.: Mineralogy, petrography, and oxygen isotopic compositions of ultrarefractory inclusions from carbonaceous chondrites (abstract #2416). 49th Lunar and Planetary Science Conference, Woodlands, Texas (2018).

537. Lunning N. G., Bischoff A., McCoy T. J., and Corrigan C. M.: Melt clasts in R chondrites: Indigenous and foreign (abstract #1552). 49th Lunar and Planetary Science Conference, Woodlands, Texas (2018).

536. Lunning N. G., Bischoff A., Gross J., Patzek M., McCoy T. J., and Corrigan C. M.: Disequilibrium crystallization of Rumuruti chondrite impact melts. Abstract P42C-28 presented at 2018 Fall Meeting, AGU, Washington, D.C., 10-14 Dec. (2018).

535. Patzek M., Bischoff A., Ludwig T., Trieloff M., Visser E., and John T.: O-isotopes of mineral constituents of CI-like clasts from ureilites (abstract #6256). *Meteoritics & Planetary Science* 53, 6256 (2018).

534. Patzek M., Pack A., Bischoff A., Visser R., and John T.: O-isotope composition of CI- and CM-like clasts in ureilites, HEDs, and CR chondrites (abstract #6254). *Meteoritics & Planetary Science* 53, 6254 (2018).

533. Patzek M., Bischoff A., Visser R., and John T.: Mineralogy of volatile-rich clasts in brecciated meteorites. *Meteoritics & Planetary Science* 53, 2519-2540 (2018).

532. Patzek M., Bischoff ., Pack A., Hoppe P., Visser R. and John T.: How many CI-like parent bodies existed in the Early Solar System? Abstract P43C-02 presented at 2018 Fall Meeting, AGU, Washington, D.C., 10-14 Dec. (2018).

531. Roszjar J., Whitehouse M. J., Terada K., Fukuda K., John T., Bischoff A., Morishita Y., and Hiyagon H. 2018. The dynamic history of Mars – adding another puzzle piece from the analysis of Ca-phosphates in Martian meteorites (abstract #26473). PANGEO AUSTRIA 2018, Vienna.

530. Shollenberger Q., Borg L.E., Render J., Ebert S., Bischoff A., Russell S. S., and Brennecka G. A.: Isotopic coherence of refractory inclusions from CV and CK meteorites: Evidence from multiple isotope systems. *Geochim. Cosmochim. Acta* 228, 62-80 (2018).

529. Visser R., John T., Menneken M., Patzek M., and Bischoff A.: Temperature constraints by Raman spectroscopy of organic matter in volatile-rich clasts and carbonaceous chondrites. *Geochim. Cosmochim. Acta* 241, 38-55 (2018).

528. Visser R., John T., Patzek M., and Bischoff A., and Whitehouse M.: Sulfur isotope composition of sulfides in carbonaceous chondrites and volatile-rich CI- and CM-like clasts from various chondrites and achondrites (abstract #6190). *Meteoritics & Planetary Science* 53, 6190 (2018).

527. Visser R., JohnT., Patzek M., Bischoff A., and Whitehouse M.: In situ sulfur isotope study of sulfides in carbonaceous chondrites and volatile-rich clasts. Abstract P31G-3764 presented at 2018 Fall Meeting, AGU, Washington, D.C., 10-14 Dec. (2018)

526. Weyrauch M., Horstmann M., and Bischoff A.: Chemical variations of sulfides and metal in enstatite chondrites – Introduction of a new classification scheme. *Meteoritics & Planetary Science* 53, 394-415 (2018).

2017

525. Bischoff A., Wurm G., Chaussidon M., Horstmann M., Metzler K., Weyrauch M., and Weinauer J.: The Allende multi-compound chondrule (ACC) – chondrule formation in a local super-dense region of the early Solar System. *Meteoritics & Planetary Science* 52, 906-924 (2017).

524. Bischoff A., Barrat J.-A., Bauer K., Burkhardt C., Busemann H., Ebert S., Gonsior M., Hakenmüller J.,Haloda J., Harries D., Heinlein D., Hiesinger H., Hochleitner R., Hoffmann V., Kaliwoda M., Laubenstein M., Maden C., Meier M. M. M., Morlok A., Pack A., Ruf A., Schmitt-Kopplin P., Schönbächler M., Steele R. C. J., Spurny P., and Wimmer K.: The Stubenberg meteorite - an LL6 chondrite fragmental breccia recovered soon after precise prediction of the strewn field. *Meteoritics & Planetary Science* 52, 1683-1703 (2017).

523. Bischoff A., Ebert S., Metzler K., and Lentfort S.: Breccia classification of CM chondrites. *Meteoritics & Planetary Science* 52, Special Issue, A26, #6089 (2017).

522. Alfing J., Patzek M., and Bischoff, A.: Modal abundances of accessory phases within clasts in CI chondrites. Paneth Kolloquium, Nördlingen (Germany), abstract #0078. URL: http://www.paneth.eu/PanethKolloquium/2017/0078.pdf (2017).

521. Bartoschewitz R., Appel P., Barrat J.-A., Bischoff A., Caffee M. W., Franchi I. A., Gabelica Z., Greenwood R. C., Harir M., Harries D., Hochleitner R., Hopp J., Laubenstein M., Mader B., Marques R., Morlok A., Nolze G., Prudêncio M. I., Rochette P., Ruf A., Schmitt-Kopplin Ph, Seemann E., Szurgot M., Tagle R., Wach R. A., Welten K. C., Weyrauch M., and Wimmer K. The Braunschweig meteorite – a recent L6 chondrite fall in Germany. *Chemie der Erde – Geochemistry* 77, 207-224 (2017).

520. Bast R., Scherer E. E., and Bischoff A. The ^{176}Lu-^{176}Hf systematics of ALM-A: A sample of the recent Almahata Sitta meteorite fall. *Geochem. Persp. Let*. 3, 45-54 (2017).

519. Ebert S., Bischoff A., Harries D., Barrat J.-A. Pack A., Lentfort S., Kimpel S., Vasilev S., Wengert S.Northwest Africa 11024 - The first CM3 chondrite or a dehydrated anomalous carbonaceous chondrite? (abstract#1903) 48th Lunar and Planetary Science Conference, Woodlands, Texas (2017).

518. Ebert S., Render J., Brennecka G. A., Bischoff A., Burkhardt C., and Kleine T.: ^{50}Ti excesses in CAIs from ordinary and Rumuruti chondrites. *Meteoritics & Planetary Science* 52, Special Issue, A78, #6250 (2017).

517. Ebert S., Render J., Brennecka G. A., Burkhardt C., Bischoff A., and Kleine T.: ^{50}Ti evidence for different refractory precursors in chondrules. *Meteoritics & Planetary Science* 52, Special Issue, A79, #6255 (2017).

516. Ebert S., Render J., Brennecka G.A., Bischoff A., Burkhardt C., Gerber S., and Kleine T.: ^{50}Ti isotope data from CAIs and Na-Al-rich chondrules: Evidence for different refractory precursors in the ordinary chondrite (OC) region. Paneth Kolloquium, Nördlingen (Germany), (abstract #0025) URL: http://www.paneth.eu/PanethKolloquium/2017/0025.pdf (2017).

515. Friend P., Hezel D. C., Palme H., Bischoff A., and Gellissen M.: Complementary element relationships between chondrules and matrix in Rumuruti chondrites. Earth Planetary Science Letters 480, 87-96 (2017).

514. Kita N. T., Tenner T. J., Ushikubo T., Nakashima D., Defouilloy C., Hertwig A., Chaumard N., Rudraswami N. G., Weisberg M. K., Kimura M., Nagahara H., and A. Bischoff A.: Oxygen isotope reservoirs in the protoplanetary disk inferred from chondrules in primitive meteorites (abstract #2022). Chondrules as Astrophysical Objects. The University of British Columbia, Vancouver, BC, Canada (2017).

513. Kita N. T., Tenner T. J., Ushikubo T., Nakashima D., Defouilloy C., Hertwig A., Chaumard N., Rudraswami N. G., Weisberg M. K., Kimura M., Nagahara H., and A. Bischoff A.: Oxygen isotope systematics in chondrules from multiple chondrite groups: Implications to the isotope reservoirs in the protoplanetary disk (abstract #2020). Accretion-Building New Worlds. Lunar and Planetary Institute, Houston (2017).

512. Krämer A.-K. and Bischoff A. Mineralogical characterization of three new lunar meteorite finds from the Sahara. Paneth Kolloquium, Nördlingen (Germany), abstract #0081. URL:http://www.paneth.eu/PanethKolloquium/2017/0081.pdf) (2017)

511. Kruijer T. S., Kleine T., Borg L. E., Brennecka G. A., Irving A. J., Bischoff A., and Agee C. B.: The early differentiation of Mars inferred from Hf-W chronometry. *Earth Planet. Science Letters* 474, 345-354 (2017).

510. Lentfort S., Kimpel S., Ebert S., and Bischoff A.: Ca,Al-rich inclusions within the unique CM-chondrite NWA 11024. Paneth Kolloquium, Nördlingen (Germany), abstract #0031. URL: http://www.paneth.eu/PanethKolloquium/2017/0031.pdf (2017).

509. Li X., Leister N., Lierse von Gostomski C., Merchel S., Gurlit S., Muszynski A., Szyszko M., and Bischoff A.: Bulk anaylsis of extraterrestrial samples using INAA at the research reactor FRM II. Paneth Kolloquium, Nördlingen (Germany), abstract #0096. URL:http://www.paneth.eu/PanethKolloquium/2017/0096.pdf (2017).

508. Morlok A., Bischoff A., Patzek M., Sohn M., and Hiesinger H.: Chelyabinsk – a rock with many different (stony) faces: An infrared study. *Icarus* 284, 431-442 (2017).

507. Patzek M., Hoppe P., Bischoff A., Visser R., and John T.: Water-bearing, volatile-rich clasts in howardites and polymict ureilites – carriers of Deuterium-enriched waters not sampled by individual meteorites. *Meteoritics & Planetary Science* 52, Special Issue, A267, #6183 (2017).

506. Patzek M., Hoppe P., Alfing J., and Bischoff A.: Brecciation of CI chondrites: Uncoupled D/H and elemental ratios in individual fragments – Evidence for a low variability in D/H ratio after alteration. *Meteoritics & Planetary Science* 52, Special Issue, A266, #6185 (2017).

505. Patzek M., Hoppe P., Bischoff A., Visser R., and John T.: CI-like clasts in polymict ureilites and HEDs: Identification of components from an so far unknown carbonaceous chondrite parent body. Paneth Kolloquium, Nördlingen (Germany), abstract #0028. URL: http://www.paneth.eu/PanethKolloquium/2017/0028.pdf (2017).

504. Riebe M. E. I., Welten K. C., Meier M. M. M., Wieler R., Barth M. I. F., Ward D., Laubenstein M., Bischoff A., Caffee M.W., Nishiizumi K., and Busemann H. Cosmic-ray exposure ages of six chondritic Almahata Sitta fragments. *Meteoritics & Planetary Science* 52, 2353-2374 (2017); DOI: 10.1111/maps.12936.

503. Schleiting M. and Bischoff A.: Brecciation of ordinary chondrites - survey of 2248 meteorites. *Meteoritics & Planetary Science* 52, Special Issue, A306, #6085 (2017).

502. Schleiting M. and Bischoff A.: Brecciation of ordinary chondrites - study of 2248 meteorites. Paneth Kolloquium, Nördlingen (Germany), abstract #0027. URL: http://www.paneth.eu/PanethKolloquium/2017/0027.pdf (2017).

501. Storz J., Bischoff A., Degering D., Ebert S., Heinlein D., Jull T., Kontul I., Li X., Merchel S., Oberst J., Ott U., Pack A., Peters S., Petö M.K., and Rugel G.: Cloppenburg (H4-5) - first results of a new find. Paneth Kolloquium, Nördlingen (Germany), abstract #0075. URL: http://www.paneth.eu/PanethKolloquium/2017/0075.pdf (2017)

500. Visser R., John T., Menneken M., Patzek M., and Bischoff A.: Raman temperature constrains of volatile-rich clasts in polymict ureilites, polymict eucrites, and howardites. *Meteoritics & Planetary Science* 52, Special Issue, A369, #6097 (2017).

499. Visser R., John T., Menneken M., Patzek M., and Bischoff A.: Raman carbon thermometry constraints of low temperature carbonaceous chondrites and volatile-rich clasts. Paneth Kolloquium, Nördlingen (Germany), abstract #0043. URL: http://www.paneth.eu/ PanethKolloquium/2017/0043.pdf (2017).

498. Ward D., Bischoff A., Roszjar J., Berndt J., and Whitehouse M. J.: Trace element inventory of meteoritic Ca-phosphates. *American Mineralogist* 102, 1856-1880 (2017).

497. Ward D., Bischoff A., Roszjar J., Berndt J., and Whitehouse M. J.: U and Th abundances and REE mass balance of extraterrestrial Ca-phosphates. *Meteoritics & Planetary Science* 52, Special Issue, A378, #6194 (2017).

2016

479. Bischoff A., Ebert S., Patzek M., Horstmann M., Pack A., and Decker S.: Almahata Sitta news: Well-known varieties and new species in the zoo (#6319). *Meteoritics & Planetary Science* 51, Special Issue, A167 (2016).

480. Barrat J.-A., Gillet P., Dauphas N., Bollinger C., Etoubleau J., Bischoff A., and Yamaguchi A.: Evidence from Tm anomalies for non-CI refractory lithophile element proportions in terrestrial planets and achondrites. *Geochim. Cosmochim. Acta*. 176, 1-17 (2016).

481. Barrat J.-A., Jambon A., Yamaguchi A., Bischoff A., Rouget M.-L., and Liorzou C.: Partial melting of a C-rich asteroid: Lithophile trace elements in ureilites. *Geochim. Cosmochim. Acta*. 194, 163-178 (2016).

482. Bast R., Scherer E. E., Sprung P., Mezger K., and Bischoff A.: The ^{176}Lu-^{176}Hf system as a tool to date meteorites and trace early silicate differentiation: Requirements and pitfalls. Abstract AGU-Fall Meeting, San Francisco (2016).

483. Bast R., Scherer E. E., Sprung P., Mezger K., and Bischoff A.: Recent terrestrial disturbance of the ^{176}Lu-^{176}Hf systematics in meteorites. *Meteoritics & Planetary Science* 51, Special Issue, #6164 (2016).

484. Ebert S. and Bischoff A.: Genetic relationship between Na-rich chondrules and Ca,Al-rich inclusions? – Formation of Na-rich chondrules by melting of refractory and volatile precursors in the solar nebula. *Geochim. Cosmochim. Acta* 177, 182-204 (2016).

485. Ebert S. and Bischoff A.: The Stubenberg (Bavaria) ordinary chondrite breccia: The latest German meteorite fall (#6137). *Meteoritics & Planetary Science* 51, Special Issue, A244 (2016).

486. Goodrich C. A., Ebert S., Bischoff A., Treiman A. H., Pack A., and Barrat J.-A.: MS-MU-012: A primary plagioclase-bearing main Group ureilite from Almahata Sitta, with implications for the igneous evolution of the ureilite parent body (#6105). *Meteoritics & Planetary Science* 51, Special Issue, A292 (2016).

487. Kita N. T., Tenner T- J., Ushikubo T., Nakashima D., Rudraswami N. G., Weisberg M. K., Defouilloy C., Kimura M., Nagahara H., and Bischoff A.: Internal homogeneity of oxygen isotope ratios in chondrules. *Lunar Planet. Sci. XLVII*, #2375, Lunar and Planetary Institute, Houston (2016).

488. Kita N. T., Tenner T. J., Ushikubo T,. Hertwig A., Chaumard N., Defouilloy C., Nakashima D., Rudraswami N. G., Weisberg M. K., Kimura M., Nagahara H., and Bischoff A.: Chondrule oxygen isotope systematics among different chondrite groups: Variety of isotope reservoirs in the protoplanetary disk (#6378). *Meteoritics & Planetary Science* 51, Special Issue, A373 (2016).

489. Kruijer T. S., Kleine T., Borg L., Brennecka G. A., Fischer-Gödde M., Irving A. J., Bischoff A., and Agee C. B.: Coupled ^{142}Nd-^{182}W evidence for early crust formation on Mars. *Lunar Planet. Sci. XLVII*, #2115, Lunar and Planetary Institute, Houston (2016).

490. Kruijer T. S., Kleine T., Borg L., Brennecka G. A., Fischer-Gödde M., Irving A. J., Bischoff A., and Agee C. B.: ^{182}W–^{142}Nd Constraints on the Early Differentiation of Mars (abstr. #1614). Goldschmidt-Meeting, Yokohama (2016).

491. Patzek M., Ebert S., and Bischoff A.: New volatile-rich clasts from brecciated chondrites and achondrites (#6136). *Meteoritics & Planetary Science* 51, Special Issue, A511 (2016).

492. Roszjar J., Whitehouse M. J., Srinivasan G., Mezger K., Scherer E. E., Van Orman J. A., and Bischoff A.: Prolonged magmatism on 4 Vesta inferred from Hf-W analyses of eucrite zircon. Earth Planet Sci. Lett. 452, 216-226 (2016).

493. Vergara-Pinto A., Trigo-Rodríguez J.M., Reche Estrada J., Bischoff A., Ebert S., Acevedo R., Martínez-Jiménez M., and Laubenstein M: Caromeco L5/6 chondrite: A large and moderately weathered Argentinian find. *Lunar Planet. Sci. XLVII*, #1917, Lunar and Planetary Institute, Houston (2016).

494. Ward D., Bischoff A., Roszjar J., Whitehouse M. J.: Trace element inventory of meteoritic Ca-phosphates. *Lunar Planet. Sci. XLVII*, #1456, Lunar and Planetary Institute, Houston (2016).

495. Ward D., Bischoff A., Roszjar J., Berndt J., and Whitehouse M. J.: Trace element abundances in extraterrestrial apatite and merrillite (#6306). *Meteoritics & Planetary Science* 51, Special Issue, A649 (2016).

496. Weber I., Morlok A., Bischoff A., Hiesinger H., Ward D., Joy K. H., Crowther S. A., Jastrzebski N. D., Gilmour J. D., Clay P. L., Wogelius R.A., Greenwood R.C., Franchi I.A., and Münker C.: Cosmochemical and spectroscopic properties of Northwest Africa 7325 – a consortium study. *Meteoritics & Planetary Science* 51, 3-30 (2016).

2015

461. Bischoff A., Ebert S., Patzek M., Horstmann M., Pack A., Barrat J.-A., and Decker S.: New individuals from the Almahata Sitta strewn field: Old friends and brand-new fellows. *Meteoritics & Planetary Science* 50, Special Issue, #5092 (2015).

462. Amelin Y., Koefoed P., Bischoff A., Budde G., Brennecka G., and Kleine T.: Pb isotopic age of ALM-A – a feldspar-rich volcanic rock from the crust of the ureilite parent body. Meteoritics & Planetary Science 50, Special Issue, #5344 (2015).

462. Barrat J.-A., Rouxel O., Wang K., Moynier F., Yamaguchi A., Bischoff A., and Langlade J.: Early stages of core segregation recorded by Fe isotopes in an asteroidal mantle. Earth Planet. Sci. Lett. 419, 93–100 (2015).

463. Cerny A. C., Grathoff G.H., and Bischoff A.: Chondrules in ordinary chondrites - textural analysis of droplets in the size range of 1-3 mm. Paneth Kolloquium, Nördlingen (Germany), abstract #0005 (2015).

464. Crowther S. A., Busemann H., and Bischoff A.: Constraining the thermal history of the Rumuruti chondrite parent body: I-Xe ages of distinct lithologies of NWA 753. *Lunar Planet. Sci. XLVI*, #2197, Lunar and Planetary Institute, Houston (2015).

465. Ebert S. and Bischoff A.: Formation of Na-rich chondrules by melting of Na-rich and condensed (ultra)-refractory precursors. *Meteoritics & Planetary Science* 50, Special Issue, #5062 (2015).

466. Ebert S. and Bischoff A.: Origin of Na-rich chondrules in chondrites: A link to (ultra)-refractory condensates. Paneth Kolloquium, Nördlingen (Germany), abstract #0006 (2015).

467. Funk C., Wombacher F., Becker H., Bischoff A., Günther D., and Münker C.: Sulfur, Se, and Te abundances in chondrites and their components. Abstract Goldschmidt-Meeting, Prague (2015).

468. Funk C., Wombacher F., Günther D., Becker H., Bischoff A., and Münker C.: Abundance and distribution of S, Se, and Te in chondrites and their components. Paneth Kolloquium, Nördlingen (Germany), abstract #0071 (2015).

469. Horstmann, M., Ebert, S., Vollmer, C., Barth, M.I.F., Chaussidon, M., Gurenko, A., Bischoff, A.: CM chondrite aqueous alteration – chemical and oxygen isotope constraints from calcite. Paneth Kolloquium, Nördlingen (Germany), abstract #0025 (2015).

470. Kita N. T., Tenner T. J., Defouilloy C., Nakashima D., Ushikubo T. and Bischoff A.: Oxygen isotope systematics of chondrules in R3 clasts: A genetic link to ordinary chondrites. *Lunar Planet. Sci. XLVI*, #2053, Lunar and Planetary Institute, Houston (2015).

471. Loesche C., Wurm G., Teiser J., Friedrich J. M., Bischoff A., Mac Low M.-M., McNally C. P., Hubbard A., and D. S. Ebel D. S.: On the photophoretic force exerted on mm- and sub-mm-sized particles. Meteoritics & Planetary Science 50, Special Issue, #5137 (2015).

472. Kruijer T. S., Kleine T., Borg L., Fischer-Gödde M., Irving A. J., Bischoff A., and Agee C. B.: High-precision ^{182}W measurements of Martian meteorites for constraining the early evolution of Mars. *Lunar Planet. Sci. XLVI*, #1928, Lunar and Planetary Institute, Houston (2015).

473. Patzek M. and Bischoff A.: Search and characterization of volatile-rich clasts in brecciated meteorites. Meteoritics & Planetary Science 50, Special Issue, #5057 (2015).

474. Patzek M. and Bischoff A.: Characterization of new volatile-rich clasts found in brecciated chondrites and achondrites. Paneth Kolloquium, Nördlingen (Germany), abstract #0010 (2015).

475. Schleiting M. and Bischoff A.: Brecciation of LL chondrites. Paneth Kolloquium, Nördlingen (Germany), abstract #0015 (2015).

476. Vogel N., Bochsler P., Bühler F., Heber V. S., Grimberg A., Baur H., Horstmann M., Bischoff A., and Wieler R.: Similarities and differences between the solar wind light noble gas compositions determined on Apollo 15 SWC foils and on NASA Genesis targets. *Meteoritics & Planetary Science* 50, 1663-1683 (2015).

477. Ward D., Bischoff A., Roszjar J., and Whitehouse M. J.: REE content of meteoritic Ca-phosphates. *Meteoritics & Planetary Science* 50, Special Issue, #5056 (2015).

478. Ward D., Bischoff A., Roszjar J., and Whitehouse M. J.: REE signatures in meteoritic Ca-phosphates. Paneth Kolloquium, Nördlingen (Germany), abstract #0049 (2015).

2014

430. Bischoff A.: Ordnung im Sternenstaub? In: „*Aus dem Nichts*“ von Jochen Kitzbihler, mpk, Museum Pfalzgalerie Kaiserslautern, Kaiserslautern, Germany. ISBN 978-3-89422-193-5 (2014).

431. Bischoff A., Horstmann M., Barrat J.-A., Chaussidon M., Pack A., Herwartz D., Ward D., Vollmer C., and Decker S.: Trachyandesitic volcanism in the early Solar System. Proc. Natl. Acad. Sci. 111, 12689-12692 (2014).

432. Barth M., Vollmer, C., Bischoff A., and Horstmann M.: Clues to the formation of nanoscale alteration textures in the CM chondrites Murchison and Maribo (abstract MET-T16). DMG-Meeting, Jena, 200 (2014).

433. Bast R., Scherer E. E., Sprung P., Fischer-Gödde M., Vollmer C., Bischoff A., and Mezger K.: Disturbed Lu-Hf isotope systematics of achondrites – testing a new hypothesis (abstract MET-T20). DMG-Meeting, Jena, 204 (2014).

434. Friend P., Hezel D., Palme H., and Bischoff A. Elemental complementarities in Rumuruti chondrite NWA 753 (abstract MET-T07). DMG-Meeting, Jena, 191 (2014).

435. Goodrich C. A., Bischoff A., and O'Brien D. P.: Asteroid 2008 TC_3 and the fall of Almahata Sitta, a unique meteorite breccia. *Elements* 10, 31-37 (2014).

436. Herwartz D., Pack A., Friedrichs B., and Bischoff A.: Identification of the giant impactor Theia in lunar rocks. *Science* 344, 1146-1150 (2014).

437. Herwartz D., Pack A., Friedrichs B., and Bischoff A.: The elevated $\Delta^{17}O$ composition of the Moon over the Earth. (2014, Goldschmidt-Meeting).

438. Horstmann M. and Bischoff A.: The Almahata Sitta polymict breccia and the late accretion of Asteroid 2008 TC_3 - Invited Review. *Chemie der Erde - Geochemistry* 74, 149-184 (2014).

439. Horstmann M., Humayun M., and Bischoff A.: Clues to the origin of metal in Almahata Sitta EL and EH chondrites and implications for primitive E chondrite thermal histories. *Geochim. Cosmochim. Acta* 140, 720-744 (2014).

440. Horstmann M., Humayun M., Fischer-Gödde M., Bischoff A., and Weyrauch M.: Si-bearing metal and niningerite in Almahata Sitta fine-grained ureilites and insight into the diversity of metal on the ureilite parent body. *Meteoritics & Planetary Science* 49, 1948-1977 (2014).

441. Horstmann M., Vollmer C., Barth M. I. F., Chaussidon M., Gurenko A., and Bischoff A.: Tracking aqueous alteration of CM chondrites - insights from in situ oxygen isotope measurements of calcite. *Lunar Planet. Sci. XLV*, #1761, Lunar and Planetary Institute, Houston (2014).

442. Horstmann M., Vollmer C., Barth M. I. F., Chaussidon M., Gurenko A., and Bischoff A.: Oxygen isotope systematics of CM chondrite calcite: Constraints on aqueous alteration (abstract MET-T14). DMG-Meeting, Jena, 198 (2014).

443. Horstmann M., Vollmer C., Barth M. I. F., Chaussidon M., Gurenko A., and Bischoff A.: Oxygen isotope systematics of calcites from CM chondrites: Constraints on aqueous alteration (abstract). DFG-Meeting, Heidelberg (2014).

444. Loesche C., Teiser J., Wurm G., Hesse A., Friedrich J.M., and Bischoff A.: Photophoretic Strength on Chondrules. 2. Experiment. Astrophys. J. 792, 73 (2014).

445. Moroz L. V., Starukhina L. V., Rout S. S., Sasaki S., Helbert J., Baither D., Bischoff A., and Hiesinger H.: Space weathering of silicate regoliths with various FeO contents: New insights from laser irradiation experiments and theoretical spectral simulations. Icarus 235, 187-206 (2014).

446. Moyano-Cambero C. E., Trigo-Rodriguez J. M., Bischoff A., and Mestres N.: Raman and SEM-EDS study of Chelyabinsk LL5-6 chondrite breccia (abstract #4008). Workshop on Modern Analytical Methods Applied to Earth and Planetary Sciences in Sopron, Hungary (2014).

447. Palme H., Friend P., Hezel D., and Bischoff A.: Significance of Fe/Mg ratios in chondritic meteorites (abstract #5116). Meteoritics & Planetary Science 49, A312 (2014)

448. Riebe M., Welten K. C., Meier M. M. M., Caffee M. W., Nishiizumi K., Bischoff A., and Wieler R.: Cosmic Ray Exposure Ages of Six Chondritic Almahata Sitta Fragments (abstract 5359). Meteoritics & Planetary Science 49, A341 (2014).

449. Roszjar J., Whitehouse M. J., and Bischoff A.: Meteoritic zircon – Occurrence and chemical characteristics. Chemie der Erde – Geochemistry 74, 453-469 (2014).

450. Roszjar J., Whitehouse M. J., and Bischoff A.: Rare earth element signatures of meteoritic zircon (abstract MET-T02). DMG-Meeting, Jena, 186 (2014).

451. Roszjar J., John T., Whitehouse M. J., Bischoff A., and Terada K.: The halogen signature of young phosphates in the Ksar Ghilane 002 Martian rock (abstract #5215). *Meteoritics & Planetary Science* 49, A348 (2014).

452. Trigo-Rodriguez J. M., Moyano-Cambero C. E., Mestres N., and Bischoff A.: A Raman study of Chelyabinsk LL5-6 chondrite breccia: investigating the signatures of shock-induced melting in Near Earth Asteroids. *Lunar Planet. Sci. XLV*, #1729, Lunar and Planetary Institute, Houston (2014).

453. Trigo-Rodriguez J. M., Llorca J., Weyrauch M., Bischoff A., Moyano-Cambero C. E., Keil K., Laubenstein M., Pack A., Madiedo J. M., Alonso-Azcárate J., Riebe M., Wieler R., Ott U., Tapia M., and Mestres N.: The Ardón L6 ordinary chondrite: A long hidden Spanish meteorite fall. *Meteoritics & Planetary Science* 49, 1475-1484 (2014).

454. Trigo-Rodriguez J. M., Llorca J., Weyrauch M., Bischoff A., Moyano-Cambero C. E., Keil K., Laubenstein M., Pack A., Madiedo J. M., Alonso-Azcárate J., Riebe M., Wieler R., Ott U., Tapia M., and Mestres N.: Ardón: A long hidden L6 chondrite fall (abstract #5068). *Meteoritics & Planetary Science* 49, A401 (2014).

455. Trigo-Rodriguez J. M., Moyano-Cambero C. E., Llorca J., Mestres N., and Bischoff A.: The influence of shocked minerals in the spectra and albedo of Chelyabinsk (abstract). Asteroids Comets Meteors (ACM), Helsinki (2014).

456. Vollmer C., Barth M. I. F., Le Guillou C., Ramasse Q., Horstmann M., and Bischoff A.: The early stages of aqueous alteration in CM chondrites - TEM-UltraSTEM-STXM investigations of the less-altered chondrite Maribo. *Lunar Planet. Sci. XLV*, #1543, Lunar and Planetary Institute, Houston (2014).

457. Ward D., Roszjar J., Bischoff A.' and Leschner L.: Accessory Ca-phosphates in meteorites – distribution and composition (abstract MET-P01). DMG-Meeting Jena, 210 (2014).

458. Weber I., Morlok A., Bischoff A., Hiesinger H., and Helbert J.: Mineralogical and spectroscopic studies on NWA 7325 as an analogue sample for rocks from Mercury. *Lunar Planet. Sci. XLV*, #1323, Lunar and Planetary Institute, Houston (2014).

459. Weyrauch M., Horstmann M., and Bischoff A.: Sulfide chemistry of enstatite chondrites – identification of EH- and EL-subgroups? (abstract MET-06). DMG-Meeting Jena, 190 (2014).

460. Weyrauch M., Horstmann M., and Bischoff A.: Chemistry of sulfides and metal in enstatite chondrites - how many parent lithologies (bodies)? (abstract #5280). Meteoritics & Planetary Science 49, A433 (2014).

2013

414. Bischoff A., Dyl K. A., Horstmann M., Ziegler K., Wimmer K., and Young E. D.: Reclassification of Villalbeto de la Peña – occurrence of a winonaite-related fragment in a hydrothermally metamorphosed polymict L-chondritic breccias. *Meteoritics & Planetary Science* 48. 628-640 (2013).

415. Bischoff A., Horstmann M., Pack A., Herwartz D., and Decker S.: Almahata Sitta sample MS-MU-011: A rapidly crystallized basalt from the crust of the ureilite parent body. *Meteoritics & Planetary Science* 48. No.5104, A60 (2013).

416. Bischoff A., Horstmann M., Vollmer C., Heitmann U., and Decker S.: Chelyabinsk – not only another ordinary LL5 chondrite, but a spectacular chondrite breccia. *Meteoritics & Planetary Science* 48, No.5171, A61 (2013).

417. Bischoff A., Ward D., Weber I., Morlok A., Hiesinger H., and Helbert J.: NWA 7325 - not a typical olivine gabbro, but a rock experienced fast cooling after a second (partial) melting event (abstract). European Planetary Science Congress, London (2013).

418. Barth M., Vollmer C., Bischoff A., and Horstmann M.: TEM observations of aqueously altered phases in Maribo (CM2) and Murchison (CM2). *Meteoritics & Planetary Science* 48. No.5090, A51 (2013).

419. Claydon J. L., Ruzicka A., Crowther S. A., Lee M. Y. P., Bischoff A., Busemann H., and Gilmour J. D.: First I-Xe ages of Rumuruti chondrites and the thermal history of their parent body. Lunar Planet. Sci. XLIV, #2211, Lunar and Planetary Institute, Houston (2013).

420. Horstmann M., Humayun M., Harries D., Langenhorst F., Chabot N. L., Bischoff A., Zolensky M. E.: Wüstite in the fusion crust of Almahata Sitta sulfide-metal assemblage MS-166: Evidence for oxygen in metallic melts. *Meteoritics & Planetary Science* 48, 730-743 (2013).

421. Horstmann M., Vollmer C., Barth M., Chaussidon M., Gurenko A., and Bischoff A.: Tracing aqueous alteration in CM chondrites: Inplications from in-situ oxygen isotope measurements of calcite. *Meteoritics & Planetary Science* 48, No.5088, A170 (2013).

422. Kita N. T., Tenner T.J., Udhikubo T., Nakashima D., and Bischoff A.: Primitive chondrules in a highly unequilibrated clast in the NWA 753 R chondrite. Lunar Planet. Sci. XLIV, #1784, Lunar and Planetary Institute, Houston (2013).

423. Kita N. T., Tenner T.J., Nakashima D., Udhikubo T., and Bischoff A.: Primary oxygen isotope signatures of chondrules in R chondrites. *Meteoritics & Planetary Science* 48, A202 (2013).

424. Lee M. Y. P., Busemann H., Bischoff A., Claydon J. L., Crother S. A., Gilmour J. D., Vogel N., and Wieler R.: The primordially trapped noble gas component in the Rumuruti parent body. *Lunar Planet. Sci. XLIV*, #2681, Lunar and Planetary Institute, Houston (2013).

425. Llorca J., Roszjar J., Cartwright J.A., Bischoff A., Ott U., Pack A., Merchel S., Rugel G., Fimiani L., Korschinek G., Casado J. V., and Allepuz D.: The Ksar Ghilane 002 shergottite – the 100th registered Martian meteorite fragment. *Meteoritics & Planetary Science* 48, 493-513 (2013).

426. Loesche C., Wurm G., Teiser J., Friedrich J. M., and Bischoff A.: Photophoretic strength on chondrules. 1: Modeling. The Astrophysical Journal 778:101 (2013).

427. Morlok A., Weber I., Ahmedi M., Bischoff A., Hiesinger H., and Helbert J.: Ungrouped achondrite NWA 7325: Infrared and Raman study of a potential sample from Mercury (abstract). European Planetary Science Congress, London (2013).

428. Roszjar J., John T., Whitehouse M. J., Bischoff A., and Layne G. D.: Halogens in the early Solar System inferred from meteoritic phosphates (abstract). Goldschmidt-Conference, Florence (2013).

429. Rout S. S., Dohmen R., Klemme S., Baither D., Morlok A., Weber I., Moroz L., Hiesinger H., and Bischoff A.: Growth of nano iron inclusions in films produced by pulsed laser irradiation of olivine: Simulations of space weathering on Mercury. *Lunar Planet. Sci. XLIV*, #2721, Lunar and Planetary Institute, Houston (2013).

2012

393. Bischoff A., Horstmann M., Heusser G., Pack A., and Albrecht N.: Almahata Sitta sample MS-181: The first carbonaceous chondrite (CB_a) from Asteroid 2008 TC_3. *Meteoritics and Planetary Science* 47: A71 (2012).

394. Cartwright J. A., Ott U., Roszjar J., Barrat J. A. and Bischoff A.: Noble gases & CRE ages of eucrites NWA 5073, NWA 2550 and HaH 286. *Meteoritics and Planetary Science* 47: A95 (2012).

395. Dyl K. A., Bischoff A., Ziegler K., Young E. D. Wimmer K., and Bland P. A. 2012. Early Solar System hydrothermal activity in chondritic asteroids on 1-10-year timescales. *Proc. Natl. Acad. Sci* 109:18306-18311.

396. Funk C., Wombacher F., Becker H., and Bischoff A.: Isotope dilution analysis of Se and Te in chondritic meteorites. *Goldschmidt-Meeting, 2012*

397. Haack H., Grau T., Bischoff A., Horstmann M., Wasson J., Sorensen A., Laubenstein M., Ott U., Palme H., Gellissen M., Greenwood R., Pearson V., Franchi I., Gabelica Z., and Schmitt-Kopplin P.: Maribo – a new CM fall from Denmark. *Meteoritics & Planetary Science* 47, 30-50 (2012).

398. Hoffmann V. H., Mikouchi T., Torii M., Funaki M., Kaliwoda M., Hochleitner R., Horstmann M., Bischoff A., Gnos E., Hofmann B., Yamamoto Y., and Kodama K.: Almahata Sitta magmatism – a compilation. Abstract "*Asteroids, Comets, Meteors (ACM)-Meeting*", Niigata, Japan (2012).

399. Horstmann M., Humayun M., Harries D., Langenhorst F., Chabot N. L., and Bischoff A.: Wüstite in the Almahata Sitta poymict ureilite: Implications for oxygen during asteroidal

differentiation. *Lunar Planet. Sci. XLIII*, #1876, Lunar and Planetary Institute, Houston (2012).

400. Horstmann M., Humayun M., Harries D., Langenhorst F., Chabot N. L., Bischoff A., and Zolensky M. E.: Wüstite in the fusion crust oft he MS-166 Almahata Sitta metal-sulfide assemblage. *Meteoritics and Planetary Science* 47: A194 (2012).

401. Horstmann M., Bischoff A., Pack A., Albrecht N., Weyrauch M., Hain H., Roggon L., and Schneider K. Mineralogy and oxygen isotope composition of new samples from the Almahata Sitta strewn field. *Meteoritics and Planetary Science* 47: A193 (2012).

402. Horstmann M., Krause J., Berndt J., and Bischoff A.: Rare earth element systematics in 48 R chondrite Ca,Al-rich inclusions. *Meteoritics and Planetary Science* 47: A195 (2012).

403. Moroz L. V., Starukhina L. V., Rout S. S., Sasaki S., Leroux H., Helbert J., Baither D., Bischoff A., and Hiesinger H.: Space weathering of Fe-poor silicate regoliths: Experimental and theoretical simulations. *Lunar Planet. Sci. XLIII*, #1488, Lunar and Planetary Institute, Houston (2012).

404. Robens E., Adolphs J., Bischoff A., Goworek J., Kutarov V. V., Mendyk E., Schreiber A., and Skrzypiec K.: Investigation of surface properties of lunar soils. *Z. geol. Wissenschaften* Berlin 40; 1, 43 – 55 (2012).

405. Roszjar J., Srinivasan G., Whitehouse M., Bischoff A., and Mezger K.: Hf-W analyses on eucrite zircon: New crystallization timescales of the eucrite parent body. *Lunar Planet. Sci. XLIII*, #1774, Lunar and Planetary Institute, Houston (2012).

406. Roszjar J., Bischoff A., Llorca J., and Pack A.: Ksa Ghilane 002 (KG 002) – A new shergottite: Discovery, mineralogy, chemistry and oxygen isotopes. *Lunar Planet. Sci. XLIII*, #1780, Lunar and Planetary Institute, Houston (2012).

407. Roszjar J., Whitehouse M., Srinivasan G., Mezger K., and Bischoff A.: Evidence for prolonged magmatism on Vesta inferred from eucrite zircon grains. *Meteoritics and Planetary Science* 47: A332 (2012).

408. Rout S. S., Stockhoff T., Moroz L. V., Hofsäss H., Dohmen R., Zhang K., Baither D., Schade U., Bischoff A., Hiesinger H.: High temperature, nanoscale changes in films produced by irradiation of iron bearing silicates: Laboratory simulations of space weathering in Hermean environment. *Lunar Planet. Sci. XLIII*, #1998, Lunar and Planetary Institute, Houston (2012).

409. Srama R., H. Krüger, T. Yamaguchi, T. Stephan, M. Burchell, A. Kearsley, V. Sterken, F. Postberg, S. Kempf, E. Grün, N. Altobelli, P. Ehrenfreund, V. Dikarev, M. Horanyi, Z. Sternovsky, J. D. Carpenter, A. Westphal, Z. Gainsforth, A. Krabbe, J. Agarwal, H. Yano, J. Blum, H. Henkel, J. Hillier, P. Hoppe, M. Trieloff, S. Hsu, A. Mocker, K. Fiege, S. F. Green, A. Bischoff, F. Esposito, R. Laufer, T. W. Hyde, G. Herdrich, S. Fasoulas, A. Jäckel, G. Jones, P. Jenniskens, E. Khalisi, G. Moragas-Klostermeyer, F. Spahn, H. U. Keller, P. Frisch, A. C. Levasseur-Regourd, N. Pailer, K. Altwegg, C. Engrand, S. Auer, J. Silen, S. Sasaki, M. Kobayashi, J. Schmidt, J. Kissel, B. Marty, P. Michel, P. Palumbo, O. Vaisberg, and H. P. Röser: SARIM PLUS - Sample Return of Comet 67P/CG and of Interstellar Matter. *Experimental Astronomy* 33, 723-751 (2012).

410. Vollmer C., Horstmann M., Barth M., Bischoff A., and Putnis A.: Timing of hydration on the CM parent body inferred from combined in-situ studies on the Maribo and Murchison chondrites. *Meteoritics and Planetary Science* 47: A393 (2012).

411. Weyrauch M. and Bischoff A.: Macrochondrules in chondrites – Formation by melting of mega-sized dust aggregates and/or by rapid collisions at high temperatures? *Meteoritics and Planetary Science* 47: 2237-2250 (2012).

412. Weyrauch M. and Bischoff A.: Macrochondrules in chondrites and their textural differences to normal-sized chondrules – indications for a different origin? *Meteoritics and Planetary Science* 47: A409 (2012).

413. Wunderlich R., Klingner N., Vogt J., Bischoff A., and Spemann D.: Quantitative IBA microscopy on lateral highly inhomogenoue meteorite samples. *13th international Conference on Nuclear Microprobe Technology & Application 2012*, Lisbon: p. 185, #120 (2012).

2011

374. Bischoff A., Vogel N., and Roszjar J.: The Rumuruti chondrite group – Invited Review. *Chemie der Erde - Geochemistry* 71, 101-134 (2011).

375. Bischoff A. Jersek M., Grau T., Mirtic B., Ott U., Kucera J., Horstmann M., Laubenstein M., Herrmann S., Randa Z., Weber M., and Heuser G.: Jesenice – a new meteorite fall from Slovenia. *Meteoritics & Planetary Science* 46, 793-804 (2011).

376. Bryson K. L., Peeters Z., Salama F., Foing B., Ehrenfreund P., Ricco A. J., Jessberger E., Bischoff A., Breitfellner M., Schmidt W., and Robert F.: The ORGANIC experiment on EXPOSE-R on the ISS: Flight sample preparation and ground control spectroscopy. Adv. Space Res. 48, 1980-1996 (2011).

377. Funk C., Bischoff A., and Schlüter J.: Xenoliths in carbonaceous and ordinary chondrites. *Meteoritics & Planetary Science* 46, A71 (2011).

378. Giannini M., Boffa Ballaran T., Langenhorst F., and Bischoff A.: TEM-EELS study of titanium oxidation state in meteoritic hibonites. *Meteoritics & Planetary Science* 46, A77 (2011).

378. Giannini M., Boffa Ballaran T., Langenhorst F., and Bischoff A.: TEM-EELS measurements of Titanium oxidation state in hibonites. Workshop on Formation of the First Solids in the Solar System, Hawaii (2011)

379. Horstmann M., Bischoff A., and Berndt J.: REE abundances of CAIs in Rumuruti chondrites. Mineralogical Magazine 75 (3), 1046 (2011).

380. Horstmann M., Humayun M., and Bischoff A.: Siderophile element patterns of sulfide-metal assemblages from the Almahata Sitta polymict breccias. *Meteoritics & Planetary Science* 46, A101 (2011).

381. Horstmann M., Humayun M., and Bischoff A.: Rare Earth Element (REE) abundances of sulfides from E chondrite lithologies of the Almahata Sitta polymict breccia. *Meteoritics & Planetary Science* 46, A102 (2011).

382. Janots E., Gnos E., Hofmann B. A., Greenwood R. C., Franchi I. A., and Bischoff A.: Jiddat al Harasis 422: the strongest shock-melted ureilite. *Meteoritics & Planetary Science* 46, 134-148 (2011).

383. Leschner L., Roszjar J., John T., and Bischoff A.: Phosphates in ordinary chondrites. *Meteoritics & Planetary Science* 46, A137 (2011).

384. Matthes M., and Bischoff A.: Silicate-bearing sulfide-metal assemblages in primitive ordinary chondrites. *Meteoritics & Planetary Science* 46, A149 (2011).

385. Metzler K., Bischoff A., Greenwood R.C., Palme H., Gellissen M., Hopp J., Franchi I.A., and Trieloff M.: The L3-6 chondritic regolith breccia Northwest Africa (NWA) 869: (I) Petrology, chemistry, oxygen isotopes, and Ar-Ar age determinations. *Meteoritics & Planetary Science* 46, 652-680 (2011).

386. Moroz L. V., Rout S. S., Sasaki S., Helbert J., Baither D., Bischoff A., and Hiesinger H.: Space weathering of Fe-poor silicate regoliths: Reflectance spectra and SEM/TEM studies of laser-irradiated andesine-labradorite. EPSC Abstracts, Vol. 6, EPSC-DPS2011-1811 (2011).

387. Moroz L. V., Schade U., Rout S. S., and Bischoff A.: Reflectance spectroscopy of cloudy pyroxenes from Millbillillie eucrite. EPSC Abstracts, Vol. 6, EPSC-DPS2011-1826 (2011).

388. Roszjar J., Metzler K., Bischoff A., Barrat J.-A., Geisler T., Greenwood R. C., Franchi I. A., and Klemme S.: Thermal history of Northwest Africa (NWA) 5073 - a coarse-grained Stannern-trend eucrite containing cm-sized pyroxenes and large zircon grains. *Meteoritics & Planetary Science* 46, 1754-1773 (2011).

389. Roszjar J., John T., Whitehouse M., Layne G., and Bischoff A.: Halogen composition of the early Solar System inferred from meteoritic apatites. Mineralogical Magazine 75 (3), 1759 (2011).

390. Roszjar J., Scherer E. E., Mezger K., and Bischoff A.: Solar system initial $^{176}Hf/^{177}Hf$ inferred from the eucrite Northwest Africa 5073. *Meteoritics & Planetary Science* 46, A200 (2011).

391. Rout S. S., Moroz L. V., Stockhoff T., Baither D., Bischoff A., and Hiesinger H.: Changes in size of nono phase iron inclusions with temperature: Experimental simulation of space weathering effects at high temperature. EPSC Abstracts, Vol. 6, EPSC-DPS2011-1860 (2011).

392. Vogel N., Baur H., Bischoff A., Wieler R. Cosmic ray exposure ages of Rumuruti chondrites from North Africa. *Chemie der Erde - Geochemistry* 71, 135-142 (2011).

2010

359. Bischoff A., Horstmann M., Laubenstein, M., and Haberer S. Asteroid 2008 TC_3 – Almahata Sitta: Not only a ureilitic meteorite, but a breccia containing many different achondritic and chondritic lithologies (abstract #1763). 41st Lunar and Planetary Science Conference (2010).

360. Bischoff A., Horstmann M., Pack A., Laubenstein M., and Haberer S.: Asteroid 2008 TC_3 – Almahata Sitta: A spectacular breccia containing many different ureilitic and chondritic lithologies. *Meteoritics & Planetary Science* 45, 1638-1656 (2010).

361. Bischoff A. Jersek M., Grau T., Mirtic B., Ott U., Kucera J., Horstmann M., Laubenstein M., Herrmann S., Randa Z., Weber M., and Heuser G.: Jesenice (L6) – a recent meteorite fall from Slovenia. *Meteoritics & Planetary Science* 45, A15 (2010).

362. Horstmann M. and Bischoff A.: Characterization of spectacular lithologies from the Almahata Sitta breccia (abstract #1784). 41st Lunar and Planetary Science Conference (2010).

363. Horstmann M. and Bischoff A.: Formation and evolution of the highly unconsolidated asteroid 2008 TC_3. *Meteoritics & Planetary Science* 45, A83 (2010).

364. Horstmann M. and Bischoff A.: Ureilitic and chondritic lithologies in the Almahata Sitta meteorite breccia and implications for the evolution of asteroid 2008 TC_3. DMG-Meeting-abstracts, S. 74 (2010).

365. Horstmann M., Bischoff A., and Berndt J.: Trace element abundances of CAIs from R chondrites. *Meteoritics & Planetary Science* 45, A84 (2010).

366. Horstmann M., Bischoff A., Pack A., and Laubenstein M.: Almahata Sitta – fragment MS-CH: Characterization of a new chondrite type. *Meteoritics & Planetary Science* 45, 1657-1667 (2010).

367. Metzler K., Bischoff A., Palme H., and Gellissen M.: Impact melt rocks from the L3-6 chondritic regolith breccia Northwest Africa (NWA) 869. *Meteoritics & Planetary Science* 45, A137 (2010).

368. Moroz L. V., Schade U., Maturilli A., Helbert J., D`Amore M., Rout S. S., Bischoff A., and Hiesinger H.: Spectral reflectance library of Mercury analogue materials and the role of viewing geometry in analysis of remote TIR emission spectra. EPSC Abstracts, Vol. 5, EPSC2010 (2010).

369. Roszjar J., Bischoff A., Scherer E. E., and Metzler K.: Northwest Africa (NWA) 5073: The coarsest-grained eucrite and ist complex postcrystallization history. DMG-Meeting-abstracts, S. 75 (2010).

370. Roszjar J., Geisler T., and Bischoff A.: Constraints on the thermal evolution of meteorites applying Raman spectroscopic and electron microprobe analyses on zircon grains. *Meteoritics & Planetary Science* 45, A174 (2010).

371. Rout S. S., Keil K., and Bischoff A.: Bulk chemical compositions of Al-rich objects from Rumuruti (R) chondrites: Implications for their origin. *Chemie der Erde – Geochemistry* 70, 35-53 (2010).

372. Wurm G., Teiser J., Bischoff A., Haack H., and Roszjar J. Experiments on the photophoretic motion of chondrules and dust aggregates – Indications for the transport of matter in protoplanetary disks. *Icarus* 208, 482-491 (2010).

373. Zipfel J., Bischoff A., Schultz L., Spettel B., Dreibus G., Schönbeck T., and Palme H.: Mineralogy, chemistry, and irradiation record of Neuschwanstein (EL6) chondrite. *Meteoritics & Planetary Science* 45, 1488-1501 (2010).

2009

340. Dabrowski A., Robens E., Mendyk E., Bischoff A., Schreiber A., Gac W., Dumanska-Slowik M., Skrzypiec K., and Goworek J.: Determination of surface area, porosity, and surface properties of lunar regolith. Characterisation of Porous Solids VIII. Royal Society of Chemistry Special Publications 318, 362-369 (2009).

341. Dyl K. A., Bischoff A., Ziegler K., Wimmer K., and Young E. D.: Metamorphic conditions within the Villalbeto de la Peña L-chondrite parent body based on petrologic and UV laser fluorination oxygen isotopic studies on an unique fragment. Lunar Planet. Sci. XL, #2506, Lunar and Planetary Institute, Houston (2009).

342. Dyl K. A., Bischoff A., Ziegler K., Wimmer K., and Young E. D.: Evidence for aqueous alteration in ordinary chondrites from compositional and oxygen isotopic trends in an exotic fragment. Meteoritics & Planet. Sci. 44, A65 (2009).

343. Humayun M., Keil K., and Bischoff A. Siderophile elements in metal from Northwest Africa 2526, an enstatite chondrite partial melt residue. Lunar Planet. Sci. XL, #1744, Lunar and Planetary Institute, Houston (2009).

344. Janots E., Gnos E., Hofmann B. A., Greenwood R. C., Franchi I. A., and Bischoff A. Jiddat al Harasis 422: The first ureilitic impact melt breccia (abstract). Meteoritics & Planetary Science 44, A100 (2009).

345. Kutarov V. V., Bischoff A., Robens E., and Schreiber A. Adsorption measurements at lunar regolith and ist Evaluation. 32nd International Conference on Vacuum Microbalance and Thermoanalytical Techniques (IVMTC32), Kazimierz Dolny, Poland, June 21-24 (abstract; 2009).

346. Llorca J., Casanova I., Trigo-Rodríguez J. M., Madiedo J. M., Roszjar J., Bischoff A., Ott U., Franchi I., Greenwood R., and Laubenstein M.: The Puerto Lápice eucrite. Meteoritics & Planet. Sci. 44, 159-174 (2009)

347. Makide K., Nagashima K., Krot A. N., Huss G. R., Hutcheon I. D., and Bischoff A. Oxygen- and magnesium-isotope compositions of calcium-aluminium-rich inclusions from CR2 carbonaceous chondrites. Geochim. Cosmochim. Acta 73, 5018-5050 (2009).

348. Matthes M., Bischoff A., Heying B., Rodewald U. C., Hoffmann R.-D. and Pöttgen R. X-ray and mineralogical characterization of olivine in Ol-phyric shergottites. Meteoritics & Planet. Sci. 44, A135 (2009).

349. Moroz L. V., Schade L. V., Helbert J., Maturilli A., Rout S. S., Baither D., Sasaki S., and Bischoff A. Mercury analogue materials: Reflectance spectroscopy and space weathering simulations. MBCO2 Meeting, 3-5 June 2009, Parma (abstract).

350. Robens E., Bischoff A., Kutarov V. V., Schreiber A. et al.: Adsorption measurements at Lunar regolith. 32nd International Conference on Vacuum Microbalance and Thermoanalytical Techniques (IVMTC32), Kazimierz Dolny, Poland, June 21-24 (abstract; 2009).

351. Roszjar J., Srinivasan G., Bischoff A., Mezger K., and Whitehouse M.: Hf-W ages of zircons – new constraints on the evolution of the eucrite parent body. Lunar Planet. Sci. XL, #1655, Lunar and Planetary Institute, Houston (2009).

352. Roszjar J., Metzler K., Bischoff A., Greenwood R. C., and Franchi I. A. Norwest Africa (NWA) 5073 – an eucritic basalt with cm-sized pyroxenes. Meteoritics & Planet. Sci. 44, A178 (2009).

353. Roszjar J., Geisler T., Scherer E. E., and Bischoff A. The thermal history of zircon from the NWA 5073 eucrite as revealed by Raman spectroscopy. Meteoritics & Planet. Sci. 44, A178 (2009).

354. Rout S. S., Bischoff A., Nagashima K., Krot A. N., Huss G. R., and Keil K.: Oxygen- and magnesium-isotope compositions of calcium-aluminum-rich inclusions from Rumuruti (R) chondrites. Geochim. Cosmochim. Acta 73, 4264-4287 (2009).

355. Rout S. S., Bischoff A., Nagashima K., Krot A. N., Huss G. R., and Keil K.: Magnesium isotope compositions of CAIs from Rumuruti chondrites. Goldschmidt Conference Abstracts, A1124 (2009).

356. Rout S. S., Bischoff A., Nagashima K., Krot A. N., Huss G. R., and Keil K.: Oxygen- and Mg-isotope compositions of CAIs from Rumuruti (R) chondrites. Meteoritics & Planet. Sci. 44, A194 (2009).

357. Sprung P., Scherer E. E., Upadhyay, Mezger K., and Bischoff A.: Is the solar system non-radiogenic Hf isotope composition uniform? Goldschmidt Conference Abstracts, A1259 (2009).

358. Terada K. and Bischoff A. Asteroidal granite-like magmatism 4.53 Gyr ago. The Astrophysical Journal 699, L68-L71 (2009).

358. Vogel N., Baur H., Bischoff A., Leya I., Roszjar J., and Wieler R. ^{81}Kr-Kr dating to detect pre-irradiation effects in CAIs: Feasibility and first results. Meteoritics & Planet. Sci. 44, A212 (2009).

2008

320. Bischoff A.: Search for old, first-generation ("grandparent") lithologies in meteorite breccias. Hiroshima-Workshop (2008).

321. Dabrowski A., Robens E., Bischoff A., Schreiber A., Mendyk E., Gac W., Iwan M., Rzaczynska Z., and Goworek J.: Determination of the surface area, porosity and surface properties of lunar regolith. 8th Intern. Symp. on the Characterisation of porous Solids COPS VIII, 10-13 June 2008 (abstract; 2008).

322. Keil K. and Bischoff A.: Northwest Africa 2526: A partial melt residue of enstatite chondrite parentage. Meteoritics & Planet. Sci. 43, 1233-1240 (2008).

323. Makide K., Nagashima K., Krot A. N., Huss G. R., Hutcheon I. D., and Bischoff A.: Magnesium and oxygen isotopic compositions of Calcium-Aluminum-rich inclusions from CR carbonaceous chondrites. Lunar Planet. Sci. XXXIV, #2407, Lunar and Planetary Institute, Houston (2008).

324. Makide K., Nagashima K., Krot A. N., Huss G. R., Hutcheon I. D., and Bischoff A.: Correlated measurements of oxygen and magnesium isotopes in CR CAIs: Constraints on

the duration of CAI formation and evolution of oxygen isotopes in the inner solar nebula. Meteoritics & Planet. Sci. 43, A88 (2008).

325. Moroz L., Helbert J., Maturilli A., Sasaki S., and Bischoff A.: Laboaratory studies of Mercury analgue materials: Optical spectroscopy and space weathering simulation experiments. 37th COSPAR Scientific Assembly (abstract, 2008).

326. Pack A., Süssenberger A., Wotzlaw J., Przybilla R., and Bischoff A.: High-precision analysis of Δ17O by laser fluorination: Application to terrestrial and meteoritic samples. EPSC Abstracts, Vol. 3; EPSC2008-A-xxx (2008).

327. Robens E., Bischoff A., Schreiber A., and Unger K. K.: Investigation of surface properties of Lunar regolith - Part II. Journal of Thermal Analysis & Calorimetry 94, 627-631 (2008).

328. Rout S. S. and Bischoff A.: Ca,Al-rich inclusions in Rumuruti (R) chondrites. Meteoritics & Planet. Sci. 43, 1439-1464 (2008)

329. Rout S.S. and Bischoff A.: Chemical composition of Ca,Al-rich inclusions in Rumuruti (R) chondrites. Meteoritics & Planet. Sci. 43, A134 (2008).

330. Rout S. S. and Bischoff A.: Ca,Al-rich inclusions in Rumuruti chondrites. Lunar Planet. Sci. XXXIV, #1255, Lunar and Planetary Institute, Houston (2008).

331. Rout S. S. and Bischoff A.: Mineralogy and bulk chemical composition of Ca,Al-rich inclusions in the Rumuruti (R) chondrites. EPSC Abstracts, Vol. 3; EPSC2008-A-xxx (2008).

332. Rout S. S., Moroz L. V., Baither D., van der Bogert C. H., and Bischoff A.: Laboratory simulation of space weathering and impact heating of planetary surfaces: the TEM studies. EPSC Abstracts, Vol. 3; EPSC2008-A-xxx (2008).

333. Shih G.-Y., Nyquist L. E., Reese Y., and Bischoff A.: Sm-Nd and Rb-Sr isotopic studies of meteorite Kalahari 009: An old VLT mare basalt**.** Lunar Planet. Sci. XXXIV, #2165, Lunar and Planetary Institute, Houston (2008).

334. Sokol A. K., Fernandez V. A., Schulz T., Bischoff A., Burgess R., Clayton R. N., Münker C., Nishiizumi K., Palme H., Schultz L., Weckwerth G., Mezger K., and M. Horstmann: Geochemistry, petrology and ages of the lunar meteorites Kalahari 008 and 009: New constraints on early lunar evolution. Geochim. Cosmochim. Acta 72, 4845-4873 (2008).

335. Sprung P., Scherer E. E., Mezger K., and Bischoff A.: Is the Hf isotope composition of the bulk silicate Earth chondritic? Geochim. Cosmochim. Acta 72, A889 (2008).

336. Sprung P., Scherer E. E., Mezger K., and Bischoff A.: Variability in nonradiogenic stable Hf isotopes between bulk silicate Earth and chondrites? (abstract DMG, 2008)

337. Teiser J., Wurm G., Haack H., Bischoff A., and Roszjar J.: chondrules and photophoresis – old friends meet again. Meteoritics & Planet. Sci. 43, A152 (2008).

338. Wombacher F., Rehkämper M., Mezger K., Bischoff A., and Münker C.: Cadmium stable isotope comochemistry. Geochim. Cosmochim. Acta 72, 646-667 (2008)

339. Wurm G., Haack H., Teiser J., Bischoff A., and Roszjar J.: Chondrules, CAIs, and dust in the protoplanetary disks in the framework of photophoritic forces. Meteoritics & Planet. Sci. 43, A169 (2008).

2007

304. Bischoff A. and Schmale K.: Ca,Al-rich inclusions within the Moss CO3 chondrite - indications for severe secondary alteration. Lunar Planet. Sci. XXXVIII, #1561, Lunar and Planetary Institute, Houston (2007).

305. Fernandes V. A., Burgess R., Bischoff A., and Sokol A., and Haloda J.: Kalahari 009 and North East Africa 003: Young (<2.5 Ga) Lunar mare basalts. Lunar Planet. Sci. XXXVIII, #1611, Lunar and Planetary Institute, Houston (2007).

306. Helbert J., Moroz L.V., Maturilli A., Bischoff A., Warell J., Sprague A., and Palomba E.: A set of laboratory analogue materials for the MERTIS instrument on the ESA BepiColombo mission to Mercury. Adv. Space Res. 40, 272-279 (2007).

307. Moroz L.V., Maturilli A., Helbert J., Sasaki S., Bischoff A., and Jessberger E.K.: Mercury analogue materials: spectral reflectance, its comparison with TIR spectral emission, and space weathering simnlation experiment. Lunar Planet. Sci. XXXVIII, #1741, Lunar and Planetary Institute, Houston (2007).

308. Robens E., Bischoff A., Schreiber A., Dabrowski A., and Unger K. K.: Investigation of surface properties of Lunar regolith - Part I. Applied Surface Science 235, 5709-5714 (2007).

309. Robens E., Bischoff A., Schreiber A., Dabrowski A., and Unger K. K.: Investigation of surface properties of Lunar regolith. XXXI. Intern. Vacuum Microbalance Techniques Conference, Izmir (abstract; 2007).

310. Rout S. S. and Bischoff A.: CAIs in Rumuruti chondrites. Geochim. Cosmochim. Acta 71, Supplement 1, A855 (2007).

311. Schulz T., Sokol A., Palme H., Weckwerth G., Münker C., and Bischoff A.: Chemical composition and Lu/Hf-age of the Lunar mare Basalt meteorite Kalahari 009. Meteoritics & Planet. Sci. 42, A137 (2007).

312. Schwenzer S. P., Billmeier U., Schmale K., Bischoff A., and Ott U.: Weathering El Hammami (H5) in the laboratory – petrography and noble gases. Meteoritics & Planet. Sci. 42, A138 (2007).

313. Sokol A. K., Bischoff A., Marhas K. K., Mezger K., and Zinner E.: Early solar system chronology: Simultaneous accretion of differentiated and metamorphosed asteroidal clasts and chondrules? Lunar Planet. Sci. XXXVIII, #1296, Lunar and Planetary Institute, Houston (2007).

314. Sokol A. K., Mezger K., Chaussidon M. and Bischoff A.: Simultaneous accretion of differentiated or metamorphosed asteroidal clasts and chondrules. Meteoritics & Planet. Sci. 42, A143 (2007).

315. Sokol A. K., Bischoff A., Marhas K. K., Mezger K., and Zinner E.: Late accretion and lithification of chondritic parent bodies: Mg isotope studies on fragments from primitive chondrites and chondritic breccias. Meteoritics & Planet. Sci. 42, 1291-1308 (2007).

316. Sokol A. K., Chaussidon M., Bischoff A., and Mezger K.: Occurrence and origin of igneous fragments in chondritic breccias. Geochim. Cosmochim. Acta 71, Supplement 1, A952 (2007).

317. Srinivasan G., Chaussidon M., and Bischoff A.: Al-26 and Be-10 in Efremovka and Acfer CAIs: Constraints on the origin of short-lived radionuclides. Lunar Planet. Sci. XXXVIII, #1781, Lunar and Planetary Institute, Houston (2007)

318. Srinivasan G., Chaussidon M., and Bischoff A.: New constraints on the origin of short-lived radioactive nuclides in the early solar system. Geochim. Cosmochim. Acta 71, Supplement 1, A964 (2007).

319. Terada K., Anand M., Sokol A. K., Bischoff A., and Sano Y.: Cryptomare magmatism 4.35 Gyr ago recorded in lunar meteorite Kalahari 009. Nature 450, 849-852 (2007).

2006

295. Bischoff A., Scott E. R. D., Metzler K., and Goodrich C. A.: Nature and Origins of meteoritic breccias. Book chapter in “Meteorites and the Early Solar System II” (eds. D.S. Lauretta and H.Y. McSween Jr.), 679-712, Univ. of Arizona, Tucson (2006).

296. Fernandes V. A., Burgess R., Bischoff A., and Sokol A.: Lunar volcanism during the Erastothenian I: Kalahari 009. Meteoritics & Planet. Sci. 41, A53 (2006).

297. Fernandes V. A., Burgess R., Bischoff A., and Metzler K.: Ar composition of the melt lithology within the NWA 2457 breccia. Meteoritics & Planet. Sci. 41, A53 (2006).

298. Helbert J., Moroz L.V., Maturilli A., Bischoff A., Warell J., Sprague A., and Palomba E.: A set of laboratory analogue materials for the MERTIS instrument on the ESA BepiColombo mission to Mercury. Lunar Planet. Sci. XXXVII, #1662, Lunar and Planetary Institute, Houston, (2006).

299. Krot A. N., McKeegan K. D., Huss G. R., Liffman K., Sahijpal S., Hutcheon I. D., Srinivasan G., Bischoff A., and Keil K.: Aluminum-Magnesium and oxygen isotope study of relict Ca-Al-rich inclusions in chondrules. Astrophys. J., 639, 1227-1237 (2006).

300. Morlok A., Bischoff A., Stephan T., Floss C., Zinner E. K., and Jessberger E. K.: Brecciation and chemical heterogeneities of CI chondrites. Geochim. Cosmochim. Acta 70, 5371-5394 (2006).

301. Niemeier M. and Bischoff A.: Glanerbrug - an LL4-6 fragmental breccia with huge L chondritic clasts. Lunar Planet. Sci. XXXVII, #1625, Lunar and Planetary Institute, Houston (2006).

302. Robens E., Bischoff A., Schreiber A., Dabrowski A., and Unger K. K.: Investigation of surface properties of Lunar regolith. Applied Surface Science (abstract, 2006).

303. Sokol A. K. and Bischoff A.: Simultaneous accretion of differentiated or metamorphosed asteroidal clasts and chondrules. Meteoritics & Planet. Sci. 41, A164 (2006).

2005

284. Bischoff A. and Sokol A. K.: Surface Rocks of the Moon – Information from Lunar Meteorites. Workshop: Lunar Science – the Next Decade, Bad Honnef, 6-10 June, 2005.

285. Bischoff A., Grund T., Jording T., Heying B., Hoffmann R.-D., Rodewald U. C., and Pöttgen R.: Occurrence, structure, and formation of sinoite in enstatite chondrites. Meteoritics & Planet. Sci. 40, A20 (2005).

286. Bischoff A., Grund T., Jording T., Heying B., Hoffmann R.-D., Rodewald U. C., and Pöttgen R.: First refinement of the sinoite structure of a natural crystal from the Neuschwanstein (EL6) meteorite. Z. Naturforsch. 60b, 1231-1234 (2005).

287. Girich A. L., Semenenko V. P., Bischoff A., and Kyichan N. V.: Mineralogy and Formation of a porous, dark xenolith within the Krymka (LL3.1) chondrite. Meteoritics & Planet. Sci. 40, A56 (2005).

288. Herbert J., Jessberger E., Benkhoff J., Arnold G., Banaszkiewicz A., Bischoff A., Blecka A., Calcutt S., Colangeli L., Coradini A., Erad S., Fonti S., Killen R., Knollenberg J., Kührt E., Mann I., Mall U., Moroz L., Peter G., Rataj M., Robinson M., Spohn T., Sprague A., Stöffler D., Taylor F., and Warrell J.: MERTIS – A thermal infrared imaging spectrometer for the Bepi-Colombo mission. Lunar Planet. Sci. XXXVI, #1753, Lunar and Planetary Institute, Houston, (2005).

289. Jording T. and Bischoff A.: Occurrence and formation of sinoite in enstatite chondrites. Beih. z. Eur. J. Mineral 17, 62 (2005).

290. King P. L., Dalby K. N., Russell S. D. J., Ireland T., McSween H. Y., and Bischoff A: Early solar system granites. Meteoritics & Planet. Sci. 40, A82 (2005).

291. Nishiizumi K., Welten K. C., and Bischoff A.: Kalahari 008/009 – the shortest exposure age of all meteorites. Meteoritics & Planet. Sci. 40, A113 (2005).

292. Noguchi T., Nakamura T., Kimura M., Bischoff A., Oshawa T., and Imae N.: Mineralogy of heavily hydrated clasts in Asuka 881020, Acfer 182, and NWA 470 CH chondrites. 29th Symposium on Antarctic Meteorites, 55-56, Natl. Inst. Polar Res., Tokyo (2005).

293. Sokol A. K. and Bischoff A.: Mineralogy of the lunar meteorites Kalahari 008 and Kalahari 009. Meteoritics & Planet. Sci. 40, A144 (2005).

294. Sokol A. K. and Bischoff A.: Meteorites from Botswana. Meteoritics & Planet. Sci. 40, A177-A184 (2005)

2004

278. Bischoff A. and Schultz L.: Abundance and meaning of regolith breccias among meteorites. Meteoritics & Planet. Sci. 39, A15 (2004).

279. Kleine T., Mezger K., Münker C., Palme H., and Bischoff A.: 182Hf-182W isotope systematics of chondrites, eucrites, and martian meteorites: Chronology of core formation and early mantle differentiation in Vesta and Mars. Geochim. Cosmochim. Acta 68, 2935-2946 (2004).

280. Murty S.V.S., Rai V.K., Shukla A.D., Srinivasan G., Shukla P.N., Suthar K.M., Bhandari N. and Bischoff A.: Devgaon (H3) chondrite: classification and complex cosmic ray exposure history. Meteoritics & Planet. Sci. 39, 387-399 (2004).

281. Takeda H., Bischoff A., and Yamaguchi A. (2004) Magnesian granulitic clasts in some lunar meteorites from the feldspathic highlands. Antarctic Meteorites 28, 83-84, Natl. Inst. Polar Res. (2004).

282. Vogel N., Baur H., Bischoff A., Leya I., and Wieler R.: Noble gas studies in CAIs from CV3 chondrites – no evidence for primordial noble gases. Meteoritics & Planet. Sci. 39, 767-778 (2004).

283. Vogel N., Wieler R., Leya I., Bischoff A., and Baur H.: Noble gases in chondrules and associated metal-sulfide-rich samples: Clues on chondrule formation and the behavior of noble gas carrier phases. Meteoritics & Planet. Sci. 39, 117-135 (2004).

2003

267. Bischoff A. and Srinivasan G.: ^{26}Mg-excess in hibonites of the Rumuruti chondrite Hughes 030. Meteoritics & Planet. Sci. 38, 5-12 (2003).

268. Bischoff A. and Zipfel J.: Mineralogy of the Neuschwanstein (EL6) chondrite – first results. Lunar Planet. Sci. XXXIV, #1212, Lunar and Planetary Institute, Houston (2003).

269. Bischoff A., Heitmann U., and Flucks M.: Catalogue of Meteorites, Institut für Planetologie, WWU Münster, Germany, pp. 156 (2003).

270. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: ^{182}Hf-^{182}W chronometry of the earliest differentiation of Mars. EGS-Meeting (2003).

271. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: ^{182}W constraints on the formation and early evolution of planetary bodies. Eur. J. Mineral. 15 (Beihefte), 100 (2003).

272. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: ^{182}Hf-^{182}W constraints on the early evolution of the Martian mantle. Meteoritics & Planet. Sci. 38, A111 (2003).

273. Vogel N., Wieler R., Baur H., and Bischoff A.: Noble gases in Allende fluffy and compact CAIs. Lunar Planet. Sci. XXXIV, #1873, Lunar and Planetary Institute, Houston, (2003).

274. Vogel N., Wieler R., Bischoff A., and Baur H.: Microdistribution of primordial Ne and Ar in fine-grained rims, matrices, and dark inclusions of unequilibrated chondrites-Clues on nebular processes. Meteoritics & Planet. Sci. 38, 1399-1418 (2003).

275. Weber I., Bischoff A., and Weber D.: TEM investigations on the monomict ureilites Jalanash and Hammadah al Hamra 064. Meteoritics & Planet. Sci. 38, 145-156 (2003).

276. Wombacher F., Rehkämper M., Mezger K., Münker K., and Bischoff A.: Cadmium isotope fractionation in Enstatite and carbonaceous chondrites. Meteoritics & Planet. Sci. 38, A109 (2003).

277. Zipfel J., Spettel B., Schönbeck T., Palme A., and Bischoff A.: Bulk chemistry of the Neuschwanstein (EL6) chondrite –first results. Lunar Planet. Sci. XXXIV, #1640, Lunar and Planetary Institute, Houston, (2003).

2002

256. Bhandari N., Murty S.V.S., Shukla P.N., Mahajani R.R., Sarin M.M., Srinivasan G., Suthar K.M., Sisodia M.S., Jha S., and Bischoff A.: Itawa Bhopji (L3-5) chondrite regolith breccia: Fall, classification, and cosmogenic records. Meteoritics & Planet. Sci. 37, 549-563 (2002).

257. Bischoff A.: Discovery of purple-blue ringwoodite within shock veins of an LL6 ordinary chondrite from Northwest Africa. Lunar Planet. Sci. XXXIII, #1264, Lunar and Planetary Institute, Houston (2002).

258. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: Revised Hf-W ages for core formation in planetary bodies. Goldschmidt Conference Abstracts, Geochim. Cosmochim. Acta 66, A404 (2002).

259. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: ^{182}Hf-^{182}W and the early differentiation of planetary bodies (abstract). Eur. J. Mineral. 14, 84 (2002).

260. Kleine T., Münker C., Mezger K., Palme H., and Bischoff A.: Hf-W chronology of metal-silicate fractionation in the Early Solar System. Geo 2002, Würzburg.

261. Morlok A., Floss C., Zinner E., Bischoff A., Henkel T., Rost D., Stephan T., and Jessberger E. K.: Trace elements in CI chondrites: A heterogeneous distribution. Lunar Planet. Sci. XXXIII, #1260, Lunar and Planetary Institute, Houston (2002).

262. Vogel N., Baur H., Bischoff A., and Wieler R.: Noble gases in rims, matrix, dark inclusions, and metal-sulfides of primitive chondrites - clues for nebula processes. Meteoritics & Planet. Sci. 37, A145 (2002).

263. Vogel N., Baur H., Bischoff A., and Wieler R.: Noble gases in chondrules and metal-sulfide rims of primitive chondrites – Clues on chondrule formation. Goldschmidt Conference Abstracts, Geochim. Cosmochim. Acta 66, A809 (2002).

264. Vogel N., Baur H., Bischoff A., and Wieler R.: Remnants of solar-like noble gases in chondrules of unequilibrated chondrites. Lunar Planet. Sci. XXXIII, #1312, Lunar and Planetary Institute, Houston (2002).

265. Wombacher F., Rehkämper M., Mezger K., Münker C., and Bischoff A.: Stable isotope compositions of Cadmium in stony meteorites. Goldschmidt Conference Abstracts, Geochim. Cosmochim. Acta 66, A844 (2002).

266. Wombacher F., Rehkämper M., Mezger K., Münker C., and Bischoff A.: The stable isotope geochemistry and cosmochemistry of Cadmium (abstract). Eur. J. Mineral. 14, 178 (2002).

2001

237. Bischoff A.. Meteorite classification and the definition of new chondrite classes as a result of successful meteorite search in hot and cold deserts. Planet. Space Sci. 49, 769-776 (2001).

238. Bischoff A.: “Earth-Moon Relationships“, 2000 November 8-10, Padua, Italy. Editorial in Meteoritics & Planet. Sci. 36, 5 (2001).

239. Bischoff A.: Fantastic new chondrites, achondrites, and Lunar meteorites as the result of recent meteorite search expeditions in hot and cold deserts. Earth, Moon & Planets 85-86, 87-97 (2001).

240. Bischoff A.: Wasser in Meteoritenmutterkörpern. In “Flüssigkeiten im Weltraum/Liquids in Space“ (ed. K. Rössler), 7. Bad Honnefer Winterseminar zu Grenzproblemen der kosmischen Evolution, 23, Forschungszentrum Jülich GmbH (2001).

241. Bischoff A. and Flucks M.: Catalogue of Meteorites, Institut für Planetologie, Westf. Wilhelms-Universität Münster, Germany, pp. 125 (2001).

242. Bischoff A., Sokol A., Palme H., Schultz L., Weber H.W., and Wolf D.: Mineralogy, chemistry, and noble gases of the Rumuruti-chondrites NWA 753 and NWA 755. Meteoritics & Planet. Sci. 36, A21 (2001).

243. Kaus A. and Bischoff A.: Rare Eu^{3+} activated plagioclase in lunar meteorites and howardites. Abstract for the CL-Meeting, Freiberg (2001).

244. Kaus A. and Bischoff A.: Exotic plagioclase fragments in the lunar meteorite Dhofar 081 and howardite Hammadah al Hamra 285. Meteoritics & Planet. Sci. 36, A93-A94 (2001).

245. Morlok A., Bischoff A., Henkel T., Rost D., Stephan T., and Jessberger E.K.: The chemical heterogeneity of CI chondrites. Lunar Planet. Sci. XXXII, #1530, Lunar and Planetary Institute, Houston (2001).

246. Morlok A., Bischoff, A., Henkel T., Rost D., Stephan T., and Jessberger E.K.: Chemical variation in CI chondrites - degree and implications. Meteoritics & Planet. Sci. 36, A141 (2001).

247. Münker C., Mezger K., and Bischoff A.: ^{92}Nb-^{92}Zr constraints on early silicate differentiation on Mars. Meteoritics & Planet. Sci. 36, A143 (2001).

248. Semenenko V. P., Bischoff A., Weber I., Perron C., and Girich A. L.: Mineralogy of fine-grained material in the Krymka (LL3.1) chondrite. Meteoritics & Planet. Sci. 36, 1067-1085 (2001).

249. Sepp B., Bischoff A., and Bosbach D.: Low-temperature phase decomposition in Fe-Ni metal of the Portales meteorite. Meteoritics & Planet. Sci. 36, 587-596 (2001).

250. Srinivasan G. and Bischoff A.: Ca-K and Al-Mg studies of CAIs from CH and CR chondrites. Meteoritics & Planet. Sci. 36, A196 (2001).

251. Vogel N., Baur H., Bischoff A., Semenenko V.P., and Wieler R.: Microdistribution of the noble gases Neon and Argon in primitive chondrites and implications for their accretionary history. Lunar Planet. Sci. XXXII, #1841, Lunar and Planetary Institute, Houston (2001).

252. Vogel N., Baur H., Bischoff A., and Wieler R.: Contrasts in chondrites - microdistribution of noble gases in Allende, Leoville, and Krymka. Meteoritics & Planet. Sci. 36, A216 (2001).

253. Wombacher F., Rehkämper M., Mezger K., Münker C., and Bischoff A.: Mass-dependent Cadmium isotope fractionation in meteorites and experiments. (EUG-Meeting, 2001).

254. Wombacher F., Rehkämper M., Mezger K., Münker C., and Bischoff A.: Large evaporation/condensation related Cadmium isotope fractionation in ordinary chondrites. Meteoritics & Planet. Sci. 36, A225-A226 (2001)

255. Wombacher F., Rehkämper M., Mezger K., Münker C., and Bischoff A.: Widespread Evaporation/Condensation related Cadmium Isotope Fractionation in Chondritic Meteorites. AGU fall meeting, San Francisco (2001).

2000

222. Bischoff A.: Fantastic new chondrites, achondrites, and Lunar meteorites as the result of recent meteorite search expeditions in hot and cold deserts. In abstract volume of “Earth-Moon Relationship“, November 8-10 in Padova (Italy), 9 (2000).

223. Bischoff A.: Mineralogical characterization of primitive, type 3 lithologies in Rumuruti chondrites. Meteoritics & Planet. Sci. 35, 699-706 (2000).

224. Bischoff A.: Meteorites -petrography, classification, and the evolution of their parent bodies. In: „Asteroids, meteorites, impacts and their consequences“ (eds. R. Albrecht, H. Miller & M. Schieber) AMICO 2000, Nördlingen, Dt. Geologische Ges., 3-4 (2000).

225. Bischoff A., and Srinivasan G.: ^{26}Mg-excess in hibonites of the Rumuruti chondrite Hughes 030. Meteoritics & Planet. Sci. 35, A26-A26 (2000).

226. Bischoff A., Clayton R.N., Markl G., Mayeda T.K., Palme H., Schultz L., Srinivasan G., Weber H.W., Weckwerth G., and Wolf D.: Mineralogy, chemistry, noble gases, and oxygen and magnesium isotopic compositions of the Angrite Sahara 99555. Meteoritics & Planet. Sci. 35, A27 (2000).

227. Bischoff A., Weber D., Grund T., Niemann L., and Flucks M.: Catalogue of Meteorites, Institut für Planetologie, Universität Münster, Germany, pp. 112 (2000).

228. Kaus A., and Bischoff A.: Cathodoluminescence (CL) Properties of shocked plagioclase. Meteoritics & Planet. Sci. 35, A86 (2000).

229. Morlok A., Bischoff A., Henkel T., Rost D., Stephan T., and Jessberger E. K.: The chemical heterogeneity of CI-chondrites on the submillimeter-scale. Meteoritics & Planet. Sci. 35, A113-A114 (2000).

230. Münker C., Weyer S., Mezger K., Rehkämper M., Wombacher F. and Bischoff A.: ^{92}Nb-^{92}Zr in the early solar system. Goldschmidt-Meeting; Journal of Conference Abstracts 5(2): 731 (2000).

231. Münker C., Weyer S., Mezger K., Rehkämper M., Wombacher F. and Bischoff A.: ^{92}Nb-^{92}Zr and the early differentiation of planetary bodies. Science 289, 1538-1542 (2000).

232. Sepp B., and Bischoff A.: Die mikrostrukturelle Entwicklung in γ-Fe-Ni bei T ≤ 400°C am Beispiel des H6- Chondriten Portales Valley. Beihefte zum Eur. J. Mineral. 12, 195 (2000).

233. Sepp B., Bischoff A., Kerschhofer L.: Low-temperature phase decomposition in Fe-Ni metal of the Portales Valley meteorite. Lunar Planet. Sci. XXXI; #1604. Lunar and Planetary Institute, Houston (2000).

234. Vogel N., Baur H., Bischoff A., Semenenko V.P., and Wieler R.: Microdistribution of light noble gases in primitive chondrites and implications for their accretionary history. Meteoritics & Planet. Sci. 35, A165-A166 (2000).

235. Weber I., and Bischoff A.: Formation and evolution of the ureilite parent body(ies): A TEM study on Hammadah al Hamra 064 and Jalanash. Meteoritics & Planet. Sci. 35, A167 (2000).

236. Weber I., Greshake A., and Bischoff A.: Low-cristobalite in the Martian meteorite Zagami. Lunar Planet. Sci. XXXI; #1342. Lunar and Planetary Institute, Houston (2000).

1999

215. Bischoff A., Goodrich C. A., and Grund T.: Shock-induced origin of diamonds in ureilites. Lunar Planet. Sci. XXX; # 1100, Lunar and Planetary Institute, Houston (1999).

216. Bischoff A., Weber D., Jäckel A., and Weber I.: Mineralogical and chemical study of Martian samples: Experience from the study of Lunar rocks and meteorites. In: Conference on "Mars Exploration Program & Sample Return Missions", O2/S4(6), Paris, France (1999).

217. Grund T. and Bischoff A.: Cathodoluminescence properties of diamonds in ureilites: Further evidence for a shock-induced origin. Meteoritics & Planet. Sci. 34, A48-A49 (1999).

218. Sepp B. and Bischoff A.: The microstructure of metallic Fe-Ni in the Portales Valley meteorite. Meteoritics & Planet. Sci. 34, A106-A107 (1999).

219. Stelzner T., Heide K., Bischoff A., Weber D., Scherer P., Schultz L., Happel M., Schrön W., Neupert U., Michel R., Clayton R. N., Mayeda T. K., Bonani G., Haidas I., Ivy-Ochs S., and Sutter M.: An interdisciplinary study of weathering effects in ordinary chondrites from the Acfer region, Algeria. Meteoritics & Planet. Sci. 34, 787-794 (1999).

220. Weber D., Zipfel J., and Bischoff A.: The Libyan meteorite population. Workshop on „Extraterrestrial Materials from Hot and Cold Deserts", Kwa-Maritane, Pilanesberg Game Reserve, South Africa, 81-82 (1999).

221. Weber I. and Bischoff A.: Microstructures in pyroxenes from the Martian meteorite Zagami and the achondrites Bishopville (aubrite), Hammadah al Hamra 064, and Jalanash (ureilites). Meteoritics & Planet. Sci. 34, A120-A121 (1999).

1998

203. Bischoff A.: Aqueous alteration of carbonaceous chondrites: Evidence for preaccretionary alteration - a review. Meteoritics & Planet. Sci. 33, 1113- 1122 (1998).

204. Bischoff A., Weber D., Bartoschewitz R., Clayton R. N., Mayeda T. K., Spettel B., and Weber H. W.: Characterization of the Rumuruti chondrite regolith breccia Hughes 030 (R3-6) and implications for the occurrence of unequilibrated lithologies on the R-chondrite parent body. Meteoritics & Planet. Sci. 33, A15-A16 (1998).

205. Bischoff A., Weber D., Clayton R. N., Faestermann T., Franchi I. A., Herpers U., Knie K., Korschinek G., Kubik P. W., Mayeda T. K., Merchel S., Michel R., Neumann S., Palme H., Pillinger C. T., Schultz L., Sexton A. S., Spettel B., Verchovsky A. B., Weber H. W.,

Weckwerth G., and Wolf D.: Petrology, chemistry, and isotopic compositions of the Lunar highland regolith breccia Dar al Gani 262. Meteoritics & Planet. Sci. 33, 1243 - 1257 (1998).

206. Greshake A., Bischoff A., and Putnis A.: Transmission electron microscope study of compact Type A calcium-aluminum-rich inclusions from CV3 chondrites: Clues to their origin. Meteoritics & Planet. Sci. 33, 75-87 (1998).

207. Greshake A., Klöck W., Arndt P., Maetz M., Flynn G. J., Bajt S., and Bischoff A.: Heating experiments simulating atmospheric entry heating of micrometeorites: Clues to their parent body sources. Meteoritics & Planet. Sci. 33, 267-290 (1998).

208. Jäckel A. and Bischoff A.: Textural and mineralogical differences between LL-chondritic fragmental and regolith breccias. Meteoritics & Planet. Sci. 33, A77-A78 (1998).

209. Schirmeyer S. and Bischoff A.: Fe-phyllosilicates in Ca,Al-rich inclusions from CM-chondrites: Formation by pre-accretionary alteration. Meteoritics & Planet. Sci. 33, A136 (1998).

210. Srinivasan G. and Bischoff A.: Mg-Al study of hibonites within a chondrule-like object from Sharps (H3). Meteoritics & Planet. Sci. 33, A148 (1998).

211. Weber D. and Bischoff A.: Classification of 400 Libyan meteorites. Meteoritics & Planet. Sci. 33, A164 (1998).

212. Weber I. and Bischoff A.: Mineralogy and chemistry of the ureilites Hammadah al Hamra 064 and Jalanash. Lunar Planet. Sci. XXIX; #1365. Lunar and Planetary Institute, Houston (1998).

213. Weber I., Bischoff A., and Langenhorst F.: Preliminary results of microstructural TEM investigations of distinct fine-grained components within the ureilite Hammadah al Hamra 064. Meteoritics & Planet. Sci. 33, A165 (1998).

214. Zipfel J., Spettel B., Palme H., Wolf D., Franchi I., Pillinger C. T., and Bischoff A.: Dar al Gani 400, chemistry and petrology of the largest lunar meteorite. Meteoritics & Planet. Sci. 33, A171 (1998).

1997

190. Bischoff A.: Aqueous alteration of carbonaceous chondrites: Evidence for pre-accretionary alteration. Workshop on "Parent Body and Nebular Modification of Chondritic Materials". LPI Tech. Rep. No. 97-02, Part 1, 2-3, Lunar and Planetary Institute, Houston (1997).

191. Bischoff A. and Weber D.: Dar al Gani 262: The first lunar meteorite from the Sahara. Meteoritics & Planet. Sci. 32, A13-A14 (1997).

192. Bischoff A., Weber D., Spettel B., Clayton R. N., Mayeda T. K., Wolf D., and Palme H.: Hammadah al Hamra 180: A unique unequilibrated chondrite with affinities to LL-group ordinary chondrites. Meteoritics & Planet. Sci. 32, A14 (1997)

193. Jäckel A. and Bischoff A.: Potassium-rich fragments in LL-chondritic breccias. Meteoritics & Planet. Sci. 32, A66 (1997).

194. Jäckel A. and Bischoff A.: Petrologische und mikrochemische Untersuchungen an den LL-chondritischen Breccien Acfer 066 und Acfer 091. Beihefte Eur. J. Mineral. 9, 168 (1997).

195. Jäckel A., Romstedt J., and Bischoff A.: Acfer 066 (LL3-6) - petrologic and track study of a spectacular regolith breccia. Lunar Planet. Sci. XXVIII, 645-646, Lunar and Planetary Institute, Houston (1997)

196. Leroux H., Doukhan J.C. and Bischoff A.: Mineralogy and crystallization history of the Ilafegh 009 EL-chondritic impact-melt rock. An ATEM investigation. Meteoritics & Planet. Sci. 32, 365-372 (1997).

197. Schirmeyer S., Hoppe P., Stephan T., Bischoff A., and Jessberger E.K.: A Lithium-bearing Ca,Al-rich inclusion from the CM-chondrite Cold Bokkeveld studied by TOF-SIMS and conventional SIMS. Lunar Planet. Sci. XXVIII, 1253-1254, Lunar and Planetary Institute, Houston (1997).

198. Stelzner T., Heide K., Bischoff A., Weber D., Merchel S., Herpers U., Faestermann T., Knie K., Korschinek G., Kubik P. W., Suter M., Neumann S., Michel R., Scherer P., Schultz L., and Jull A.J.T.: Rincon: A new L6 chondrite find from Argentina. Chem. Erde 57, 297-309 (1997).

199. Weber D. and Bischoff A.: Refractory inclusions in the CR chondrite Acfer 059-El Djouf 001: Petrology, chemical composition, and relationship to inclusion populations in other types of carbonaceous chondrites. Chem. Erde 57, 1-24 (1997).

200. Weber D. and Bischoff A.: Statistical analysis of the Saharan Hammadah al Hamra and Dar al Gani meteorite population. Meteoritics & Planet. Sci. 32, A137 (1997)

201. Weber D., Schultz L., Weber H. W., Clayton R. N., Mayeda T. K., and Bischoff A.: Hammadah al Hamra 119 - a new, unbrecciated Saharan Rumuruti chondrite. Lunar Planet. Sci. XXVIII, 1511-1512, Lunar and Planetary Institute, Houston (1997).

202. Wolf D., Weckwerth G., Spettel B., Palme H., Weber D., and Bischoff A.: Ein neuer Mondmeteorit aus der Sahara. Beihefte zum Eur. J. Mineral. 9, 395 (1997).

1996

170. Bischoff A.: Lunar meteorite QUE93069: A lunar highland regolith breccia with very low abundances of mafic components. Meteoritics & Planet. Sci. 31, 849-855 (1996).

171. Bischoff A. and Weber D.: Meteorites from Libya: Old and new finds. Meteoritics & Planet. Sci. 31, A15 (1996).

172. Bischoff A., Gerel O., Buchwald V.F., Spettel B., Loeken T., Schultz L., Weber H.W., Schlüter J., Baljinnyam L., Borchuluun D., Byambaa C., and Garamjav D.: Meteorites from Mongolia. Meteoritics & Planet. Sci. 31, 152-157 (1996).

173. Endreß M. and Bischoff A.: Carbonates in CI chondrites: Clues to parent body evolution. Geochim. Cosmochim. Acta 60, 489-507 (1996).

174. Endreß M., Zinner E., and Bischoff A.: Early aqueous activity on primitive meteorite parent bodies: Evidence from ^{53}Mn. Nature 379, 701-703 (1996).

175. Greshake A. and Bischoff A.: Chromium-bearing phases in Orgueil (CI): Discovery of magnesiochromite ($MgCr_2O_4$), ureyite ($NaCrSi_2O_6$), and chromiumoxide (Cr_2O_3). Lunar Planet. Sci XXVII, 461-462, Lunar and Planetary Institute, Houston (1996).

176. Greshake A., Hoppe P., and Bischoff A.: Mineralogy, chemistry, and oxygen isotopes of refractory inclusions from micrometeorites and interplanetary dust particles - a review. Meteoritics & Planet. Sci. 31, 739-748 (1996).

177. Greshake A., Bischoff A., Putnis A., and Palme H.: Corundum, rutile, periclase, and CaO in Ca,Al-rich inclusions from carbonaceous chondrites. Science 272, 1316-1318 (1996, retracted 2001).

178. Greshake A., Bischoff A., and Putnis A.: Pure CaO, MgO (periclase), TiO_2 (rutile), and Al_2O_3 (corundum) in Ca,Al-rich inclusions from carbonaceous chondrites. Lunar Planet. Sci. XXVII, 463-464 (1996).

179. Greshake A., Bischoff A., Putnis A., and Palme H.: Occurrence of oxides in minerals of Ca,Al-rich inclusions from carbonaceous chondrites: Al_2O_3 (corundum), TiO_2 (rutile), MgO (periclase), and CaO. Meteoritics & Planet. Sci. 31, A54 (1996).

180. Greshake A., Klöck W., Arndt P., Maetz M., and Bischoff A.: Pulse-heating of fragments from Orgueil (CI): Simulation of atmospheric entry heating of micrometeorites. In: "The cosmic dust connection" (ed. J. M. Greenberg), 303-311 (1996).

181. Heide K., Stelzner Th., Weber D., and Bischoff A.: The Puna Desert: A new potential meteorite recovery area. Meteoritics & Planet. Sci. 31, A58 (1996).

182. Jäckel A. and Bischoff A.: Mineralogy of brecciated LL chondrites: Information for parent body processes. Meteoritics & Planet. Sci. 31, A66-A67 (1996).

183. Jäckel A., Bischoff A., Clayton R.N., and Mayeda T.K.: Dar al Gani 013 - a new Saharan Rumuruti-chondrite (R3-6) with highly unequilibrated (Type 3) fragments. Lunar Planet. Sci. XXVII, 595-596, Lunar and Planetary Institute, Houston (1996).

184. Metzler K. and Bischoff A.: Constraints on chondrite agglomeration from fine-grained chondrule rims. Book chapter in: "Chondrules and the Protoplanetary Disk" (eds. R.H. Hewins, R.H. Jones, and E.R.D. Scott), 153-162, Cambridge University Press (1996).

185. Schirmeyer S., Bischoff A., Stephan T., and Jessberger E.K.: Occurrence of Li in CM-chondrites: Indication of nebular alteration of Ca,Al-rich inclusions. Goldschmidt-Conference, Heidelberg (1996).

186. Schirmeyer S., Bischoff A., Stephan T., and Jessberger E.K.: Lithium-bearing phases in Ca,Al-rich inclusions from CM-chondrites: Indication of nebular alteration processes. Lunar Planet. Sci. XXVII, 1141-1142, Lunar and Planetary Institute, Houston (1996).

187. Schirmeyer S., Bischoff A., Stephan T., and Jessberger E.K.: Lithium distribution within the carbonaceous chondrites Lancé (CO3) and Allende (CV3): Preliminary results. Meteoritics & Planet. Sci. 31, A123-A124 (1996).

188. Weber D. and Bischoff A.: New meteorite finds from the Libyan Sahara. Lunar Planet. Sci. XXVII, 1393-1394, Lunar and Planetary Institute, Houston (1996).

189. Weber D., Clayton R.N., Mayeda T.K., and Bischoff A.: Unusual equilibrated carbonaceous chondrites and CO3 meteorites from the Sahara. Lunar Planet. Sci. XXVII, 1395-1396, Lunar and Planetary Institute, Houston (1996).

1995

152. Bischoff A. and Geiger T.: Meteorites from the Sahara: Find locations, shock classification, degree of weathering, and pairing. Meteoritics 30, 113-122 (1995).

153. Beckerling W. and Bischoff A.: Occurrence and composition of relict minerals in micrometeorites from Greenland and Antarctica - Implications for their origins. Planet. Space Sci. 43, 435-449 (1995)

154. Beckerling W. and Bischoff A.: Mineralogy of micrometeorites from Greenland and Antarctica: Indications for their asteroidal origin. Lunar Planet. Sci. XXVI, 91-92, Lunar and Planetary Institute, Houston (1995).

155. Deutsch A. and Bischoff A.: Die Bedeutung von Einschlägen extraterrestrischer Projektile für die Entwicklung des Planeten Erde - Ein Paradigmenwechsel in den Geowissenschaften. Berichte über die Gesellschaft zur Förderung der Westfälischen Wilhelms-Universität zu Münster e.V., 15-18 (1995).

156. Endreß M., and Bischoff A.: The compositional variability of dolomites in CI chondrites: Implications for physico-chemical conditions of circulating fluids on the CI parent body. Lunar Planet. Sci. XXVI, 371-372, Lunar and Planetary Institute, Houston (1995).

157. Geiger T. and Bischoff A.: Formation of opaque minerals in CK chondrites. Planet. Space Sci. 43, 485-498 (1995).

158. Geiger T. and Bischoff A.: Meteorite find locations, shock classification, and pairing of 453 meteorites from the Sahara and the mineralogical and chemical characterization of rare types. Workshop on "Meteorites from Cold and Hot Deserts" (eds. L. Schultz, J.O. Annexstad, and M.E. Zolensky), LPI Tech. Rpt. 95-02, 31-32, Lunar Planet. Institute, Houston (1995).

159. Gerel O., Bischoff A., Schultz L., Schlüter J., Baljinnyam L., Borchuluun D., Byambaa C., Garamjav D.: The 1993 EUROMET/Mongolian expedition to the Gobi desert: Search for meteorites. Workshop on "Meteorites from Cold and Hot Deserts" (eds. L. Schultz, J.O. Annexstad, and M.E. Zolensky), LPI Tech. Rpt. 95-02, 32-33, Lunar and Planetary Institute, Houston (1995).

160. Greshake A. and Bischoff A.: Matrix mineralogy of the unique primitive carbonaceous chondrite Acfer 094: A TEM study. Ann. Geophys. III 13, C733 (1995).

161. Greshake A., Hoppe P., and Bischoff A.: Trace element abundances in refractory inclusions from Antarctic micrometeorites. Meteoritics 30, 513 (1995).

162. Greshake A., Klöck W., Arndt P., Maetz M., and Bischoff A.: Volatile elements abundances in micrometeorites: evidence for the loss of copper, germanium, and zinc during atmospheric entry heating. Lunar Planet. Sci. XXVI, 509-510, Lunar and Planetary Institute, Houston (1995).

163. Greshake A., Klöck W., and Bischoff A.: Pulse-heating experiments simulating atmospheric entry heating of micrometeorites. Ann. Geophs. III 13, C737 (1995).

164. Greshake A., Klöck W., Flynn G.J., Bajt S., and Bischoff A.: Flash-heating of pyrrhotite from Orgueil (CI): Evidence for the loss of sulphur and selenium during atmospheric entry heating of polar micrometeorites. Lunar Planet. Sci. XXVI, 511-512, Lunar and Planetary Institute, Houston (1995).

165. Newton J., Bischoff A., Arden J.W., Franchi I.A., Geiger T., and Pillinger C.T.: Acfer 094, a uniquely primitive carbonaceous chondrite from the Sahara. Meteoritics 30, 47-56 (1995).

166. Schirmeyer S. and Bischoff A.: Chemical composition of accretionary dust mantles surrounding various components of the CM chondrites Cold Bokkeveld and Murchison. Ann. Geophys. (1995).

167. Weber D., Bischoff A., and Zinner E.: The formation of grossite-rich inclusions with Group II-related trace element abundance patterns. Ann. Geophys. (1995).

168. Weber D., Schirmeyer S., and Bischoff A.: Refractory inclusions from the CH-chondrite PCA91467: Similarities with and relationship to inclusions from ALH85085 and Acfer 182. Lunar Planet. Sci. XXVI, 1475-1476, Lunar and Planetary Institute, Houston (1995).

169. Weber D., Zinner E., and Bischoff A.: Trace element abundances and magnesium, calcium, and titanium isotopic compositions of grossite-containing inclusions from the carbonaceous chondrite Acfer 182. Geochim. Cosmochim. Acta 59, 803-823 (1995).

1994

133. Bischoff A.: Mineralogische Charakterisierung neuer Klassen chondritischer Meteorite (CR, CH, CK, R). Beihefte zum Europ. J. Mineral. 6, 31 (1994).

134. Bischoff A. and Geiger T.: The unique carbonaceous chondrite Acfer 094: The first CM3 chondrite (?). Lunar. Planet. Sci. XXV, 115-116, Lunar and Planetary Institute, Houston (1994)

136. Bischoff A., Geiger T., Palme H., Spettel B., Schultz L., Scherer P., Bland P., Clayton R.N., Mayeda T.K., Herpers U., Michel R., and Dittrich-Hannen B.: Acfer 217 - a new member of the Rumuruti chondrite group (R). Meteoritics 29, 264-274 (1994).

137. Bischoff A., Schirmeyer S., Palme H., Spettel B., and Weber D.: Mineralogy and chemistry of the carbonaceous chondrite PCA91467 (CH). Meteoritics 29, 444 (1994).

138. Beckerling W., Klöck W., and Bischoff A.: Mineralogy of fine-grained porous micrometeorites. Meteoritics 29, 442-443 (1994).

139. Endreß M. and Bischoff A.: Carbonates in the CI-chondrite Ivuna: Implications for aqueous alteration processes on the CI-parent body. Lunar Planet. Sci. XXV, 349-350, Lunar and Planetary Institute, Houston (1994).

140. Endreß M., Keil K., Bischoff A., Spettel B., Clayton R.N., and Mayeda T.K.: Origin of dark clasts in the Acfer 059/El Djouf 001 CR2 chondrite. Meteoritics 29, 26-40 (1994).

141. Endreß M., Spettel B., and Bischoff A.: Chemistry, petrography, and mineralogy of the Tonk CI-chondrite: Preliminary results. Meteoritics 29, 462-463 (1994).

142. Endreß M., Weber D., and Bischoff A.: SIMS-Studien zur Altersdatierung von Karbonaten in CI-Chondriten mittels des ^{53}Mn-^{53}Cr-Chronometers. Beihefte zum Europ. J. Mineral. 6, 61 (1994).

143. Geiger T. and Bischoff A.: Meteorite find locations, shock classification, and pairing of 453 meteorites from the Sahara and the mineralogical and chemical characterization of rare types. Workshop "Meteorites from Cold and Hot Deserts", Lunar Planet. Institute (1994).

144. Gerel O., Bischoff A., Schultz L., Schlüter J., Baljinnyam L., Borchuluun D., Byambaa C., Garamjav D.: The 1993 EUROMET/Mongolian expedition to the Gobi desert: Search for meteorites. Workshop on "Meteorites from Cold and Hot Deserts", Lunar and Planetary Institute, (1994).

145. Greshake A., Klöck W., Arndt P., Maetz M., and Bischoff A.: Pulse-heating of fragments from Orgueil (CI): Simulation of atmospheric entry heating of micrometeorites. Meteoritics 29, 470 (1994).

146. Schulze H., Bischoff A., Palme H., Spettel B., Dreibus G., and Otto J.: Mineralogy and chemistry of Rumuruti: The first meteorite fall of the new R chondrite group. Meteoritics 29, 275-286 (1994).

147. Weber D. and Bischoff A.: Grossite ($CaAl_4O_7$) - a rare phase in terrestrial and extraterrestrial rocks. Europ. J. Min. 6, 591-594 (1994).

148. Weber D. and Bischoff A.: The occurrence of grossite ($CaAl_4O_7$) in chondrites. Geochim. Cosmochim. Acta 58, 3855-3877 (1994).

149. Weber D. and Bischoff A.: Grossit ($CaAl_4O_7$): Ein Mineral aus der frühen Entstehungsphase des Sonnensystems. Beihefte zum Europ. J. Mineral. 6, 304 (1994).

150. Weber D., Zinner E., and Bischoff A.: Trace element and isotopic measurements of refractory inclusions from the Acfer 182 carbonaceous chondrite. Lunar Planet. Sci. XXV, 1475-1476, Lunar and Planetary Institute, Houston (1994).

151. Weber D., Zinner E., and Bischoff A.: An ion microprobe stud of an osbornite-bearing inclusion from ALH 85085. Meteoritics 29, 547-548 (1994).

1993

122. Bischoff A.: Alkali-granitoids as fragments within the ordinary chondrite Adzhi-Bogdo: Evidence for highly fractionated, alkali-granitic liquids on asteroids. Lunar Planet. Sci. XXIV, 113-114, Lunar and Planetary Institute, Houston (1993).

123. Bischoff A.: Adzhi-Bogdo (LL3-6) - a spectacular chondritic breccia with unusual fragments. Annales Geophysicae, Space Planet. Sci., Suppl. III to Vol. 11, C477 (1993).

124. Bischoff A., Palme H., Ash R.D., Clayton R.N., Schultz L., Herpers U., Stöffler D., Grady M.M., Pillinger C.T., Spettel B., Weber H., Grund T., Endreß M., and Weber D.: Paired Renazzo-type (CR) carbonaceous chondrites from the Sahara. Geochim. Cosmochim. Acta 57, 1587-1603 (1993).

125. Bischoff A., Palme H., Schultz L., Weber D., Weber H.W., and Spettel B.: Acfer 182 and paired samples, an iron-rich carbonaceous chondrite: Similarities with ALH 85085 and relationship to CR chondrites. Geochim. Cosmochim. Acta 57, 2631-2648 (1993).

126. Bischoff A., Geiger T., Palme H., Spettel B., Schultz L., Scherer P., Schlüter J., and Lkhamsuren J.: Mineralogy, chemistry, and noble gas contents of Adzhi-Bogdo - an LL3-6 chondritic breccia with foreign clasts. Meteoritics 28, 570-578 (1993)

127. Beckerling W. and Bischoff A.: Micrometeorites from Greenland and Antarctica. Annales Geophysicae, Space Planet. Sci., Suppl. III to Vol. 11, C477 (1993).

128. Beckerling W., Klöck W. and Bischoff A.: Relict olivines in micrometeorites from Greenland and Antarctica. Meteoritics 28, 320-321 (1993).

129. Endreß M. and Bischoff A.: A comparative study between CI-chondrites and dark clasts in the CR2-type Acfer/El Djouf meteorite from the Sahara. Annales Geophysicae, Space Planet. Sci., Suppl. III to Vol. 11, C477 (1993).

130. Endreß M. and Bischoff A.: Mineralogy, degree of brecciation, and aqueous alteration of the CI-chondrites Orgueil, Ivuna, and Alais. Meteoritics 28, 345-346 (1993).

131. Geiger T., Spettel B., Clayton R.N., Mayeda T.K., and Bischoff A.: Watson 002 - the first CK - type 3 chondrite. Meteoritics 28, 352 (1993).

132. Weber D., Ross C.R. II, Bischoff A.: X-ray data on extraterrestrial Ca-dialuminate ($CaAl_4O_7$). Meteoritics 28, 457-458 (1993).

1992

108. Bischoff A.: ALH 85085, Acfer 182, and Renazzo-type chondrites - Similarities and differences. Meteoritics 27, 203-204 (1992).

109. Bischoff A. and Stöffler D.: Shock metamorphism as a fundamental process in the evolution of planetary bodies: Information from meteorites. Europ. J. Mineral. 4, 707-755 (1992).

110. Bischoff A., Beckerling W., Weber D., and Zinner E.: Calcium-dialuminate-bearing inclusions from the Sahara meteorites Acfer 182, Acfer 087 and El Djouf 001: An ion probe study. Meteoritics 27, 204 (1992).

111. Bischoff A., Palme H., Geiger T., and Spettel B.: Mineralogy and chemistry of the EL-chondritic melt rock Ilafegh-009. Lunar Planet. Sci. XXIII, 105 - 106, Lunar and Planetary Institute, Houston (1992).

112. Bischoff A., Sears D.W.G., Benoit P.H., Geiger T., and Stöffler D.: New type 3 chondrites from the Sahara desert. Lunar Planet. Sci. XXIII, 107 - 108, Lunar and Planetary Institute, Houston (1992).

113. Beckerling W., Bischoff A., and Klöck W.: Mineralogy and chemistry of micrometeorites from Greenland and Antarctica. Meteoritics 27, 200 - 201 (1992).

114. Bland P., Hutchison R., Pillinger C.T., and Bischoff A.: A unique type 4 chondrite from the Sahara - Acfer 217. Meteoritics 27, 204 - 205 (1992).

115. Endress M., Keil K., and Bischoff A.: Dark clasts in the Acfer 059/El Djouf 001 meteorite (CR) from the Sahara: Implications for their origin. Meteoritics 27, 218 - 219 (1992).

116. Geiger T. and Bischoff A.: Mineralogy of carbonaceous chondrites and of Acfer 217 from the Sahara. Meteoritics 27, 223 (1992).

117. Geiger T., Bischoff A., Spettel B., and Bevan A.W.R.: Cook 003: A new CK chondrite from the Nullarbor region, South Australia. Lunar Planet. Sci. XXIII, 401 - 402, Lunar and Planetary Institute, Houston (1992).

118. Metzler K., Bischoff A. and Stöffler D.: Accretionary dust mantles in CM-chondrites: Evidence for nebula processes. Geochim. Cosmochim. Acta 56, 2873-2897 (1992).

119. Spettel B., Palme H., Wlotzka F., and Bischoff A.: Chemical composition of carbonaceous chondrites from Sahara and Nullarbor Plains. Meteoritics 27, 290-291 (1992).

120. Weber D. and Bischoff A.: Mineralogy and chemistry of refractory inclusions in CR-like chondrites from the Sahara desert. Lunar. Planet. Sci. XXIII, 1505 -1506, Lunar and Planetary Institute, Houston (1992).

121. Weber D. and Bischoff A.: Ca-dialuminate ($CaAl_4O_7$) - A dominating phase in Ca,Al-rich inclusions from Acfer 182. Meteoritics 27, 304-305 (1992).

1991

97. Bischoff A.: The occurrence and abundance of fine-grained accreted matter in chondrites. Annales Geophysicae, Vol. 9, C380 - C381 (1991).

98. Bischoff A. and Metzler K.: Mineralogy and petrography of the anomalous carbonaceous chondrites Y-86720, Y-82162 and B-7904. Proc. NIPR Symp. Antarct. Meteorites, 4, 226-246 (1991).

99. Bischoff A., Palme H., Clayton R.N., Mayeda T.K., Grund T., Spettel B., Geiger T., Endreß M., Beckerling W., and Metzler K.: New carbonaceous and type 3 ordinary chondrites from the Sahara desert. Meteoritics 26, 318-319 (1991).

100. Beckerling W., Klöck W. und Bischoff A.: Zusammensetzung und Mineralogie von Mikrometeoriten aus Grönland. Europ. J. Mineral., Vol. 3, Beiheft No.1, 23 (1991)

101. Geiger T. and Bischoff A.: The CK chondrites - conditions of parent body metamorphism. Meteoritics 26, 337 (1991).

102. Grün E., Bar-Nun A., Benkhoff J., Bischoff A., Düren H., Hellmann H., Hesselbarth P., Hsiung P., Keller H.U., Klinger J., Knölker J., Kochan H., Kohl H., Kölzer G., Krankowsky D., Lämmerzahl P., Mauersberger K., Neukum G., Oehler A., Ratke L., Roessler K., Spohn T., Stöffler D., and Thiel K.: Laboratory simulation of cometary processes: Results from first KOSI experiments. In "Comets in the Post-Halley Era" (eds. R.L. Newburn, M. Neugebauer, and J. Rahe), Kluver Academic Publishers, Dordrecht, The Netherlands, Vol. 1, 277-297 (1991).

103. Metzler K. and Bischoff A.: Evidence for aqueous alteration prior to parent body formation; petrographic observations in CM-chondrites. Lunar Planet. Sci. XXII, 893 - 894, Lunar and Planetary Institute, Houston (1991).

104. Metzler K., Bischoff A., and Morfill G.: Accretionary dust mantles in CM chondrites: Chemical variations and calculated time scales of formation. Meteoritics 26, 372 (1991).

105. Palme H., Spettel B., Jochum K.H., Dreibus G., Weber H., Weckwerth G., Wänke H., Bischoff A. and Stöffler D.: Lunar highland meteorites and the composition of the lunar crust. Geochim. Cosmochim. Acta 55, 3105-3122 (1991).

106. Stephan T., Bischoff A., Cramer H.-G. and Zehnpfennig J.: TOF-SIMS, applications in meteorite research, first results. Meteoritics 26, 397 (1991).

107. Stöffler D., Düren H., Knölker J., Hische R. and Bischoff A.: Cometary analogue material: Preparation, composition and thin section petrography. Geophys. Res. Lett., Vol. 18, No. 2; 285 - 288 (1991).

1990

86. Bischoff A.: Wenn das Unerreichbare plötzlich greifbar wird - Meteorite als Bausteine fremder Himmelskörper. Forschung - Mitteilungen der DFG 2/90, 26 - 28 (1990).

87. Bischoff A.: Chondrite - ursprüngliche Akkretionsgesteine des Sonnensystems. Europ. J. Min., Vol.2, Beiheft No.1, 25 (1990).

88. Bischoff A. and Metzler K.: Shock metamorphism and formation of accretionary dust mantles as fundamental nebula processes. Meteoritics 25, 350 (1990).

89. Bischoff A. and Metzler K.: Petrography and chemistry of the three carbonaceous chondrites Y-86720, Y-82162 and B-7904. 15th Symp. Antarc. Meteor., Natl. Inst. Polar Res., Tokyo, 185 - 187 (1990).

90. Bobe K.D., Bischoff A. und Stöffler D.: Impakt- und Thermometamorphose als fundamentale Prozesse in der Entwicklung des eukritischen Mutterkörpers. Europ. J. Min., Vol.2, Beiheft No.1, 27 (1990).

91. Endreß M. und Bischoff A.: Quarz- und feldspatreiche Gesteinsfragmente in Impaktschmelzen und Basaltergüssen - ein Vergleich. Europ. J. Min., Vol.2, Beiheft No.1, 51 (1990).

92. Geiger T. and Bischoff A.: Exsolution of spinel and ilmenite in magnetites from type 4-5 carbonaceous chondrites - Indications for metamorphic processes. Lunar Planet. Sci. XXI, 409 - 410, Lunar and Planetary Institute, Houston (1990).

93. Geiger T. and Bischoff A.: The metamorphosed carbonaceous chondrites - A new meteorite group? 15th Symp. Antarctic Meteor., Natl. Inst. Polar Res., Tokyo, 78 - 80 (1990).

94. Geiger T. und Bischoff A.: Die metamorphisierten kohligen Chondrite - Eine neue Meteoritengruppe? Europ. J. Min., Vol.2, Beiheft No.1, 73 (1990).

95. Metzler K. and Bischoff A.: Petrography and chemistry of accretionary dust mantles in the CM-chondrites Y-791198, Y-793321, Y-74662 and ALHA83100 - Indications for nebula processes. 15th Symp. Antarc. Meteor., Natl. Inst. Polar Res., Tokyo, 198 - 200 (1990).

96. Palme H., Spettel B., Burghele A., Dreibus G., Weckwerth G., Wänke H., Jochum K. P., Weber H., Bischoff A. and Stöffler D. Big MAC, little MAC and the composition of the lunar crust. Lunar Planet. Sci. XXI, 930 - 931, Lunar and Planetary Institute, Houston (1990).

1989

68 Bischoff A.: Mineralogische und chemische Untersuchungen an chondritischen Meteoriten: Folgerungen für die Entstehung fester Materie im Solarnebel und die Entwicklung der Meteoritenmutterkörper. Habilitationsschrift, Westf. Wilhelms-Universität, Münster, pp.264 (1989).

69. Bischoff A., Palme H. and Spettel B.: Al-rich chondrules from the Ybbsitz H4-chondrite: Evidence for formation by collision and splashing. Earth Planet. Sci. Lett. 93, 170 - 180 (1989).

70. Bischoff A., Metzler K., Stöffler D., Palme H. and Spettel B.: Mineralogy and chemistry of the anomalous chondritic breccia ALHA 85085. Lunar Planet. Sci. XX, 80 - 81, Lunar and Planetary Institute, Houston (1989).

71. Bobe K. and Bischoff A.: Die HED-Meteorite und ihr(e) Mutterkörper. Europ. J. Min., Vol.1, Beiheft No.1, 12 (1989).

72. Bobe K.D., Bischoff A. and Stöffler D.: Impact and thermal metamorphism as fundamental processes in the evolution of the Stannern, Juvinas, Jonzac, Peramiho, and Millbillillie eucrite parent body. Meteoritics 24, 252 (1989).

73. Düren H., Knölker J., Hische R., Stöffler D. and Bischoff A.: Die Bedeutung der Untersuchung künstlicher Eis-Staub-Gemische ("Kometenmaterie") für zukünftige Forschungsarbeiten im Bereich der extraterrestrischen Mineralogie. Europ. J. Min., Vol.1, Beiheft No.1, 42 (1989).

74. Geiger T. und Bischoff A.: Mineralogische Untersuchungen an metamorphisierten kohligen Chondriten. Europ. J. Min., Vol.1, Beiheft No.1, 54 (1989).

75. Geiger T. and Bischoff A.: Mineralogy of metamorphosed carbonaceous chondrites. Meteoritics 24, 269 - 270 (1989).

76. Geiger Th. and Bischoff A.: (Os,Ru,Ir)S_2 and other refractory siderophile element-rich particles in the metamorphosed carbonaceous chondrites Karoonda, Mulga (west), and PCA 82500. Lunar Planet. Sci. XX, 335 - 336, Lunar and Planetary Institute, Houston (1989).

77. Geiger Th., Metzler K., Bischoff A. and Arndt J.: Annealing experiments on Allende (CV3). Textural and mineralogical modifications. Lunar Planet. Sci. XX, 337 - 338, Lunar and Planetary Institute, Houston (1989).

78. Grün E., Bischoff A., Hesselbarth P., Keller H.U., Kochan H., Krankowsky D., Roessler K., Spohn T., Stöffler D. and Thiel K. Laboratory simulation of cometary processes. Abstract für "Comets in the Post-Halley era", Bamberg (1989).

79. Grün E., Benkhoff J., Bischoff A., Düren H., Hellmann H., Hesselbarth P., Hsiung P., Keller H.U., Klinger J., Knölker J., Kochan H., Neukum G., Oehler A., Roessler K., Spohn T., Stöffler D., and Thiel K.: Modifications of comet materials by the sublimation process: Results from simulation Experiments. Proc. "Analysis of returned comet nucleus samples", Milpitas (1989).

80. Klinger J., Eich G., Bischoff A., Joo F., Kochan H., Roessler K., Stichler, and Stöffler D.: "KOSI" comet simulation experiment at DFVLR: Sample preparation and the evolution of the $^{18}O/^{16}O$ and the D/H ratio in the icy component. Adv. Space Res., Vol. 9, No. 3, 123 - 125 (1989).

81. Kochan H., Feuerbacher B., Joo F., Klinger J., Seboldt W., Bischoff A., Düren H., Stöffler D., Spohn T., Fechtig H., Grün E., Kohl H., Krankowsky D., Roessler K., Thiel K., Schwehm G., and Weishaupt U.: Comet simulation experiments in the DFVLR space simulators. Adv. Space Res. 9, (3)113 - (3)122 (1989).

82. Kochan H., Benkhoff J., Bischoff A., Fechtig H., Feuerbacher B., Grün E., Joo F., Klinger J., Kohl H., Krankowsky D., Roessler K., Seboldt W., Thiel K., Schwehm G., and Weishaupt U.: Laboratory simulation of a cometary nucleus: Experimental setup and first results. Proc. 19th Lunar Planet. Sci. Conf., 487 - 492, Lunar and Planetary Institute, Houston (1989).

83. Metzler K. and Bischoff A.: Formation of accretionary dust mantles in the solar nebula as confirmed by noble gas data of CM-chondrites. Meteoritics 24, 303 - 304 (1989).

84. Metzler K. and Bischoff A.: Untersuchungen zur Akkretionsgeschichte primitiver chondritischer Mutterkörper - Akkretionsstaubhüllen um Chondren, Fragmente und Einschlüsse. Europ. J. Min., Vol.1, Beiheft No.1, 122 (1989).

85. Metzler K. and Bischoff A.: Accretionary dust mantles in CM-chondrites as indicators for processes prior to parent body formation. Lunar Planet. Sci. XX, 689 - 690, Lunar and Planetary Institute, Houston (1989).

1988

57. Bischoff A.: Exsolution textures produced by annealing a metal alloy of Fremdlinge composition. Lunar Planet. Sci. XIX, 82 - 83, Lunar and Planetary Institute, Houston (1988).

58. Bischoff A.: Metamorphism of ordinary chondrites - Information from a study of Al-rich chondrules. Lunar Planet. Sci. XIX, 84 - 85, Lunar and Planetary Institute, Houston (1988).

59. Bischoff A. and Palme H.: Formation of Al-rich chondrules by chondrule collision and splashing. Lunar Planet. Sci. XIX, 86 - 87, Lunar and Planetary Institute, Houston (1988).

60. Bischoff A. and Stöffler D.: Comet nucleus simulation experiments: Mineralogical aspects of sample preparation and analysis. Lunar Planet. Sci. XIX, 90 - 91, Lunar and Planetary Institute, Houston (1988).

61. Bischoff A., Palme H., Spettel B., Clayton R.N., Mayeda T. K.: The chemical composition of dark inclusions from the Allende meteorite. Lunar Planet. Sci. XIX, 88 - 89, Lunar and Planetary Institute, Houston (1988).

62. Klinger J., Joo F., Kochan H., Biel E., Roessler K., Bischoff A., Stöffler D.: Sample preparation for the comet simulation experiment at DFVLR. Abstract Form, XXVII COSPAR - Espoo, Finnland (1988).

63. Kochan H., Bischoff A., Fechtig H., Feuerbacher B., Grün E., Joo F., Klinger J., Kohl H., Krankowsky D., Roessler K., Seboldt W., Thiel K., Schwehm G., Weishaupt U.: Laboratory simulation of a cometary nucleus: Experimental setup and first results. Lunar Planet. Sci. XIX, 617 - 618, Lunar and Planetary Institute, Houston (1988).

64. Kochan H., Feuerbacher B., Joo F., Klinger J., Seboldt W., Bischoff A., Stöffler D., Fechtig H., Grün E., Kohl H., Krankowsky D., Roessler K., Thiel K., Schwehm G., Weishaupt U.: Comet simulation experiments at the DFVLR space simulators. Abstract Form, XXVII COSPAR - Espoo, Finnland (1988).

65. Metzler K., Bischoff A. and Stöffler D.: Characteristics of accretionary dark rims in carbonaceous chondrites. Lunar Planet. Sci. XIX, 772 - 774. Lunar and Planetary Institute, Houston (1988).

66. Roessler K., Bischoff A., Eich G., Grün E., Fechtig H., Joo F., Klinger J., Kochan H., Stöffler D., Thiel K.: Cometary matter in observation and simulation experiments. Lunar and Planet. Sci. XIX, 996 - 997, Lunar and Planetary Institute, Houston (1988).

67. Stöffler D., Bischoff A., Buchwald V. and Rubin A.: Shock effects in meteorites. In "Meteorites and the Early Solar System" (eds. J. Kerridge and M.S. Matthews), 165 - 202 (1988), University of Arizona Press, Tucson.

1987

49. Bischoff A. and Palme H.: Composition and mineralogy of refractory metal-rich assemblages from a Ca,Al-rich inclusion in the Allende meteorite. Geochim. Cosmochim. Acta 51, 2733 - 2748 (1987).

50. Bischoff A., Deutsch A. and Stöffler D.: Meteorite als Zeugen der Entstehung des Sonnensystems - Forschungen am Institut für Planetologie. Gesellschaft zur Förderung der Westfälischen Wilhelms-Universität, 14 - 19 (1987).

51. Bischoff A., Palme H. and Spettel B.: A37 - a coarse-grained, volatile-poor Ca,Al-rich inclusion with huge Fremdlinge. Lunar Planet. Sci. XVIII, 81 - 82, Lunar and Planetary Institute, Houston (1987).

52. Bischoff A., Palme H., Spettel B. and Metzler K.. Chemistry and petrology of dark inclusions from Allende. Meteoritics 22, 328 - 329 (1987).

53. Bischoff A., Palme H., Weber H.W., Stöffler D., Braun O., Spettel B., Begemann F., Wänke H. and Ostertag R.: Petrography, shock history, chemical composition and noble gas content of the lunar meteorites Y-82192 and Y-82193. Mem. Natl. Inst. Polar Res., Spec. Issue, 46, 21 - 42 (1987).

54. Kohl H., Bar-Nun A., Bischoff A., Fechtig H., Grün E., Joo F., Klinger J., Kochan H., Krankowsky D., Lämmerzahl P., Roessler K., Stöffler D., Thiel K., Weishaupt U.: Laborexperimente zur Kometenphysik (Laboratory studies of cometary processes). Jahresbericht 1987: MPI Heidelberg.

55. Laughlin J.R., Hinton R.W., Davis A.M. and Bischoff A.: Rare earths in rim and core perovskite in a CAI: partitioning versus volatility. Meteoritics 22, 439 - 440 (1987).

56. Metzler K. and Bischoff A.: Accretionary dark rims in CM-chondrites. Meteoritics 22, 458 - 459 (1987).

1986

42. Bischoff A.: Kometenstaub - Informationen durch primitive Chondrite, IDPs und die Giotto-Mission. Workshop: Kometensimulation (1986).

43. Bischoff A. and Palme H.: Oxidation of refractory metal-rich assemblages at high temperatures. Lunar Planet. Sci. XVII, 54 - 56, Lunar and Planetary Institute, Houston (1986).

44. Bischoff A. und Palme H.: Oxidation von refraktären Metallassoziationen bei hohen Temperaturen. Verhandlungen der Dt. Phys. Gesellschaft, 1574 (1986).

45. Bischoff A. and Palme H.: Volatile-rich clasts from lunar meteorite Y-791197. 11th Symposium on Antarctic Meteorites, 28 - 30, Natl. Inst. Polar Res., Tokyo (1986).

46. Bischoff A., Palme H., Spettel B., Stöffler D., Wänke H., and Ostertag R.: Yamato 82192 and 82193: Two other meteorites of lunar origin. 11th Symposium on Antarctic Meteorites, 34 - 36, Natl. Inst. Polar Res., Tokyo (1986).

47. Ostertag R., Stöffler D., Bischoff A., Palme H., Schultz L., Spettel B., Weber H., Weckwerth G., and Wänke H.: Lunar meteorite Yamato 791197: Petrography, shock history and chemical composition. Mem. Natl. Inst. Polar Res., Spec. Issue, 41, 17 - 44 (1986).

48. Spettel B., Palme H., and Bischoff A.: A large Ca,Al-rich inclusion from the Arch (C3V)-meteorite. Meteoritics 21, 513 - 515 (1986).

1985

34. Bischoff A.: Refraktäre und intermediäre Chondren und Einschlüsse in Chondriten. Dissertationen der Math.-Nat. Fakultät, Universität Münster, Heft 110, 43-44 (1985).

35. Bischoff A.: Al-reiche und intermediäre Chondren in dem H4-Chondriten Ybbsitz. Ann. Naturhist. Mus. Wien 87, 21 - 31 (1985).

36. Bischoff A., Keil K. and Stöffler D.: Perovskite-hibonite-spinel-bearing inclusions and Al-rich chondrules and fragments in Enstatite chondrites. Chem. Erde 44, 97 - 106 (1985).

37. Bischoff A. and Stöffler D.: Clast population statistics of the lunar meteorite Yamato 791197 - Sample from a new source region of the lunar highlands? Lunar Planet. Sci. XVI, 63 - 64, Lunar and Planetary Institute, Houston (1985).

38. Bischoff A., Spettel B., and Palme H.: Trace elements in Al-rich chondrules from Ybbsitz (H4). Meteoritics 20, 609 - 610 (1985).

39. Borchardt R., Knöll H.-D., Bischoff A., Ostertag R. and Stöffler D.: Microprobe analyses of Apollo 14 and 16 lunar minerals and rocks. University of Münster, Institute of Mineralogy, 1 - 141 (1985).

40. Ostertag R., Bischoff A., Palme H., Spettel B., Stöffler D., Weckwerth G. and Wänke H.: Lunar meteorite Y-791197: A lunar highland regolith breccia. 10th Symposium on Antarctic Meteorites, 95 - 97, Natl. Inst. Polar Res., Tokyo (1985).

41. Stöffler D., Bischoff A., Borchardt R., Burghele A., Deutsch A., Jessberger E.K., Ostertag R., Palme H., Spettel B., Reimold W.U., Wacker K. and Wänke H.: Composition and evolution of the lunar crust in the Descartes highlands, Apollo 16. Proc. Lunar Planet. Sci. 15th. J. Geophys. Res. 90, C449 - C506 (1985).

1984

19. Bischoff A.: Refraktäre und intermediäre Chondren und Einschlüsse in Chondriten. Dissertation; Institut für Mineralogie, Universität Münster, 147 pp. (1984).

20. Bischoff A.: Bulk compositions of Al-rich chondrules in ordinary and carbonaceous chondrites: Variations and similarities. Meteoritics 19, 191 - 192 (1984).

21. Bischoff A. and Keil K.: Al-rich objects in ordinary chondrites: Related origin of carbonaceous and ordinary chondrites and their constituents. Geochim. Cosmochim. Acta 48, 693 - 709 (1984).

22. Bischoff A., Keil K. and Stöffler D.: Perovskite-hibonite-spinel-bearing, refractory inclusions and Ca-Al-rich chondrules in Enstatite chondrites. Meteoritics 19, 193 - 194 (1984).

23. Bischoff A. and Lange M.A.: Experimental shock-lithificatlon of chondritic powder: Implications for ordinary chondrite regolith breccias. Lunar Planet. Sci. XV, 60 - 61, Lunar and Planetary Institute, Houston (1984).

24. Bischoff A. and Stöffler D.: Clast population statistics of the lunar meteorite ALHA81005. Lunar Planet. Sci. XV, 62 - 63, Lunar and Planetary Institute, Houston (1984).

25. Bischoff A. and Stöffler D.: Chemical and structural changes induced by thermal annealing of shocked feldspar inclusions in impact melt rocks from Lappajärvi Crater, Finland. EOS 65, No.7, 63 (1984).

26. Bischoff A. and Stöffler D.: Chemical and structural changes induced by thermal annealing of shocked feldspar inclusions in impact melt rocks from Lappajärvi Crater, Finland. Proc. Lunar Planet. Sci. Conf. 14th, J. Geophys. Res. 89, B645 - B656 (1984).

27. Bischoff A., Borchardt R., Jessberger E.K., Ostertag R., Palme H., Reimold W.U., Stöffler D., Wacker K. and Wänke H.: The lunar crust in the Descartes Highland area, Apollo 16: I. Photogeology and composition of rocks. Terra Cognita 4, 76 (1984).

28. Bischoff A., Borchardt R., Jessberger E.K., Ostertag R., Palme H., Reimold W.U., Stöffler D., Wacker K. and Wänke H.: The lunar crust in the Descartes Highland area, Apollo 16: II. Chronology and selenogical interpretations. Terra Cognita 4, 76 (1984).

29. Hinton R.W. and Bischoff A.: Ion microprobe magnesium isotope analysis of plagioclase and hibonite from ordinary chondrites. Nature 308, No.5955, 169 - 172 (1984).

30. Palme H., Spettel B., Wänke H., Bischoff A. and Stöffler D.: The evolution of the lunar magma ocean: Evidence from trace elements in plagioclase. Lunar Planet. Sci. XV, 625 - 626, Lunar and Planetary Institute, Houston (1984).

31. Palme H., Spettel B., Wänke H., Bischoff A. and Stöffler D.: Early differentiation of the Moon: Evidence from trace elements in plagioclase. Proc. Lunar Planet. Sci. 15th. J. Geopyhs. Res. 89, C3 - C15 (1984).

32. Stöffler D., Bischoff A., Borchardt R., Deutsch A., Jessberger E.K., Ostertag R., Reimold W.U., Palme H., Wacker K. and Wänke H.: The lunar crust in the Descartes area near North Ray, Apollo 16, I. Petrographic and chemical properties. Lunar Planet. Sci. XV, 828 - 829, Lunar and Planetary Institute, Houston (1984).

33. Stöffler D., Bischoff A., Borchardt R., Deutsch A., Jessberger E.K., Ostertag R., Reimold W.U., Palme H., Wacker K. and Wänke H.: The lunar crust in the Descartes area near North Ray, Apollo 16, II. Chronology and selenological interpretations. Lunar Planet. Sci. XV, 826 - 827, Lunar and Planetary Institute, Houston (1984).

1983

6. Bischoff A.: Verfestigung gasreicher chondritischer Regolithbreccien durch Stoßwellen. DFG-Kolloquium "Impaktprozesse auf Planetenoberflächen", Münster (1983).

7. Bischoff A. and Keil K.: Ca-Al-rich chondrules and inclusions in ordinary chondrites. Nature 303, No.5918, 588 - 592 (1983).

8. Bischoff A. and Keil K.: Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. Lunar Planet. Sci. XIV, 47 - 48, Lunar and Planetary Institute, Houston (1983).

9. Bischoff A. and Keil K.: Catalog of Al-rich chondrules, inclusions and fragments in ordinary chondrites. Special Publication No. 22, UNM, Institute of Meteoritics, Albuquerque, 1 - 33 (1983).

10. Bischoff A. and Keil K.: Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. Lunar Planet. Sci. XIV, 1 - 2, press abstract, Lunar and Planetary Institute, Houston (1983).

11. Bischoff A., Keil K. and Stöffler D.: Ca-Al-rich objects in ordinary chondrites: Significance for the origin of chondrules and chondrites. Fortschr. Mineral. 61, Bd. 1, 24 - 25 (1983).

12. Bischoff A., Keil K. and Stöffler D.: Abundant Al-rich objects in ordinary chondrites. Meteoritics 18, 268 - 269 (1983).

13. Bischoff A., Rubin A.E., Keil K. and Stöffler D.: Lithification of gas-rich chondrite regolith breccias by grain boundary and localized shock melting. Earth Planet. Sci. Lett. 66, 1 - 10 (1983).

14. Bischoff A., Stöffler D.. Borchardt R. and Rehfeldt A.: Clast population statistics of fragmental breccias, North Ray Crater, Apollo 16: Implications for the Descartes Formation. Lunar Planet. Sci. XIV, 49 - 50, Lunar and Planetary Institute, Houston (1983).

15. Borchardt R., Stöffler D., Bischoff A. and Reimold W.U.: Characterization of Descartes and Cayley Formations by different impact melt lithologies. Terra cognita 3, No.81, 2 - 3 (1983).

16. Borchardt R., Stöffler D., Bischoff A. and Reimold W.U.: Are the Descartes and Cayley Formations at Apollo 16 characterized by different impact melt lithologies? Lunar Planet. Sci. XIV, 59 - 60, Lunar and Planetary Institute, Houston (1983).

17. Boynton W.V., Hill D.H., Wark D.A. and Bischoff A.: Trace elements in Ca,Al-rich chondrules in the Dhajala (H3) chondrite. Meteoritics 18, 270 - 271 (1983).

18. Jammes C., Stöffler D., Bischoff A., Reimold W.U. and Gault D.E.: Reduction of SiO_2 to Si and metallurgical transformation in Al by hypervelocity impact of Al-projectiles into quartz sand. Lunar Planet. Sci. XIV, 347 - 348, Lunar and Planetary Institute, Houston (1983).

4. Bischoff A., Keil K., and Stöffler D.: Consolidation of chondrite regolith breccias by grain boundary and localized shock-melting. Meteoritics 17, 183 - 184 (1982)

5. Bischoff A., Stöffler D., and Keil K.: Consolidation and lithification of gas-rich chondrite regolith breccias by grain boundary and localized shock melting. Fortschr. Mineral. 60, 47 - 48 (1982).

1981

1. Bischoff A.: Verhalten von klastischen Feldspäten verschiedener Stoßwellen-metamorphose-Beanspruchungen in der überhitzten Impaktschmelze von Lappajärvi, Finnland. Diploma thesis. Westf. Wilhelms-Universität. Münster (1981).

2. Bischoff A. and Stöffler D.: Thermal metamorphism of feldspar clasts in impact melt rocks from Lappajärvi crater, Finland. Lunar Planet. Sci. XII, 77 - 79, Lunar and Planetary Institute, Houston (1981).

3. Bischoff A. und Stöffler D.: Reaktionen zwischen geschockten Feldspäten und Impaktschmelzen in Gesteinen des Lappajärvi-Kraters, Finnland. 41. Jahrestagung der Deutschen Geophysikalischen Gesellschaft e. V., Heidelberg, 313 (1981).