Curriculum Vitae – Dr. Jonas Pape

Planetary Sciences, Meteoritics, and Isotope Geology

Dr. Jonas Pape

Institut für Planetologie

University of Münster

E-Mail: Jonas.pape@uni-muenster.de

Phone: +49 (0) 179 9489 786

1. Personal details

Date/Place of Birth:	25.10.1982, Kiel, Germany
Nationality:	German
Languages:	German (Native), English (Fluent), French (Basic)
Researcher ID:	OrcID 0000-0001-9729-695X

2. Education

2014—2018 **PhD studies Isotope Geology and Planetary Sciences**
University of Bern and NCCR PlanetS, CH, Advisor: Prof. K. Mezger, "^{26}Al—^{26}Mg ages of chondrules and chemical constrains on their reprocessing in the early solar system."

2012—2014 **M.Sc. Earth Sciences with qualification in Earth Materials and Mineralogy**
University of Bern, Switzerland, Supervisor: Prof. K. Mezger, "The behavior of the Zr-in-rutile thermometer at UHT-conditions."

2008—2012 **B.Sc. Geosciences**
University of Kiel, Germany, Supervisors: Prof. A. Holzheid, Prof. V. Schenk, "Trace element chemistry of gabbroic rocks and minerals from the Semail ophiolite (Oman): Indication for seawater-induced anatexis?"

2003—2007 **Diploma studies of music, violin**
Universities of Music and Performing Arts Lübeck and Stuttgart (Germany)

2002 **University entrance diploma (Abitur)**
Gymnasium Elmschenhagen, Kiel, Germany

3. Employment history

since 03/2020 **Institut für Planetologie, University of Münster**
Postdoctoral Researcher Isotope Geology

2019—2020 **Natural History Museum of Bern, Switzerland**

Research Assistant, Mineralogy and Meteoritics group, Prof. Beda Hofmann

2014—2018 **Institute of Geological Sciences at University of Bern, Switzerland**
PhD student, Isotope Geology and Mineralogy group, Prof. K. Mezger

2007—2012 **Institute of Geosciences at University of Kiel, Germany**
Student Research Assistant, Experimental Mineralogy group, Prof. A. Holzheid

4. Publications in peer-reviewed scientific journals

279 citations (Google Scholar)

- [9] **Pape J**, Zhang, Spitzer F, Rubin AE, Kleine T (2024) Isotopic constraints on genetic relationships among group IIIF iron meteorites, Fitzwater Pass, and the Zinder pallasite. *Met. Planet. Sci.* 59, 778–788.
- [8] Spitzer F, Burkhardt C, **Pape J,** Kleine T (2022) Collisional mixing between inner and outer solar system planetesimals inferred from Nedagolla iron meteorite. *Met. Planet. Sci.* 57, 261–276.
- [7] Anand A, **Pape J,** Wille M, Mezger K (2021) Early differentiation and evolution of the magmatic iron meteorite parent bodies inferred from Mn-Cr chronometry. *Geochem. Perspect. Lett.* 20, 6–10.
- [6] **Pape J,** Rosén V A, Mezger K, Guillong M (2021) Primary crystallization and partial remelting of chondrules in the protoplanetary disk: Petrographic, mineralogical and chemical constraints recorded in zoned type-I chondrules. *Geochim. Cosmochim. Acta* 292, 499–517.
- [5] Anand A, **Pape J,** Wille M, Mezger K (2021) Chronological constraints on the thermal evolution of the ordinary chondrite parent bodies from the ^{53}Mn-^{53}Cr system. *Geochim. Cosmochim. Acta* 307, 281–301.
- [4] **Pape J,** Mezger K, Bouvier A-S, Baumgartner L P (2019) Time and Duration of Chondrule Formation: Constraints from ^{26}Al-^{26}Mg Ages of Individual Chondrules. *Geochim. Cosmochim. Acta* 244, 416–436.
- [3] Rosén V A, **Pape J,** Hofmann B A, Gnos E, Guillong M (2019) Quenched primary melt in Ramlat as Sahmah 517 – snapshot of ureilite anatexis in the early solar system. *Geochim. Cosmochim. Acta* 246, 1–20.
- [2] Axelsson E, **Pape J,** Berndt J, Corfu F, Mezger K, Raith M (2018) R632 – a new natural reference material for U-Pb and Zr analysis. *Geost. Geoanal. Res.* 42, 319–338.
- [1] **Pape J,** Mezger K, Robyr M (2016) A systematic evaluation of the Zr-in-rutile thermometer in ultra-high temperature (UHT) rocks. *Contrib. Min. Pet.* 171, 1–20.

5. Competitive research grants (total ~ € 140,000)

2020—2021 **SNF Early Postdoc.Mobility (CHF 124,000)**

2012—2014 **German Academic Exchange Service (DAAD) Scholarship (€ 18,000)**

6. Awards

2019 **PhD awarded *summa cum laude***

2017 **Wiley Award Meteoritical Society**

2017 **Travel and accommodation award Royal Astronomical Society**

2013 **Paul Ramdohr Award German Mineralogical Society**

7. Selected contributions to international conferences

- **Pape J**, Zhang B, Spitzer F, Rubin AE, Kleine T (2022) Tungsten and Molybdenum Isotopic Constraints on the Origin and Chronology of IIIF Iron Meteorites. LPI Contributions 2695, 6478.
- **Pape J**, Rosén Å V, Mezger K, Guillong M (2019) Chondrule formation and subsequent reprocessing by partial remelting in the protoplanetary disk. Paneth Kolloquium, Germany.
- Anand A, **Pape J**, Wille M, Hofmann B, Mezger K (2019) Mn-Cr chronological constraints on the thermal evolution of ordinary chondrite parent bodies. 17th Swiss Geoscience Meeting, Fribourg, Switzerland.
- Mezger K, **Pape J** (2019) Reprocessing of Chondrules during Early Solar System Evolution. TIGeR Conference (invited talk), Perth, Australia.
- **Pape J**, Mezger K, Bouvier A-S, Baumgartner L (2018) In-situ ^{26}Al-^{26}Mg SIMS dating of chondrules: a window to the early solar system. SwissSIMS workshop (invited talk), Lausanne.
- **Pape J**, Mezger K, Bouvier A-S, Baumgartner L (2017) In-situ ^{26}Al-^{26}Mg dating of single chondrules by SIMS. Meteoritical Society Meeting (Abstracts Volume), Santa Fe. (Wiley Award)
- Rosén Å V, **Pape J**, Hofmann B A, Guillong M (2017) Melt related textures in a new, spinel-bearing, monomict ureilite – Ramlat as Samah 517. Meteoritical Society Meeting (Abstracts Volume), Santa Fe.
- Axelsson E, Berndt-Gerdes J, **Pape J**, Corfu F, Mezger K, Raith M M (2017) Rutile R632 – A New Natural Reference Material for in-situ U-Pb and Zr Analyses. Goldschmidt Conference (Abstracts Volume), Paris.
- **Pape J**, Mezger K, Bouvier A-S, Baumgartner L (2017) In-situ ^{26}Al-^{26}Mg mineral isochrons dating of chondrules by SIMS: Samples, measurement procedure and data correction. Chondrules and Protoplanetary Disk, London.
- **Pape J**, Mezger K, Grobéty B, Neururer C (2014) Pushing the spatial limits of electron backscatter diffraction (EBSD) analysis: orientation relationships of zircon exsolutions in UHT-rutile. 12th Swiss Geoscience Meeting (*Abstracts Volume*).
- **Pape J**, Mezger K (2013) Zr-in-rutile thermometer at UHT-conditions from paragneisses in the Mafic Complex of the Ivrea Zone, Northern Italy. Joint Annual Meeting of DMG, GV and SEDIMENT (Paul Ramdohr Award).

8. Doctoral thesis

- **Pape J (2018)** ^{26}Al–^{26}Mg ages of chondrules and chemical constraints on their reprocessing in the early solar system. Dissertationsschrift, Institute of Geological Sciences, Philosophisch-naturwissenschaftliche Fakultät, Universität Bern.

9. Institutional responsibilities

2012—2018 **Responsible assistant for Electron Microprobe Analyzer laboratory**
IfG University of Bern

10. Selected Analytical and Laboratory Skills

- **Clean chemistry laboratory work** – preparation, chemical dissolution and separation of samples
- **Work with rare and precious materials** – Martian and Lunar meteorites, Apollo samples
- **MC-ICPMS –** high-precision isotope measurements

- **SIMS** – Cameca IMS 1280-HR
- **EMPA** – JEOL 8900R, JEOL 8200 Superprobe, JEOL 8350F HyperProbe
- **SEM and EBSD** – Zeiss EVO50, Quanta 3D Dual-Beam-EBSD
- **La-ICP-MS** – diverse systems
- **XRD** –Panalytical Cubix3, Siemens D5000
- **Hydrothermal facility** – cold-seal hydrothermal autoclaves

11. Teaching activities

2010—2012 **Minerals and Rocks exercises for B.Sc. students**
University of Kiel, Germany

2014—2017 **Magmatic and Metamorphic rocks exercise and lecture for B.Sc. students**
University of Bern, Switzerland

2014/2016 **Field course assistant "Petrology, Varallo, Italy" 4 days**
University of Bern, Switzerland

2016/2018 **Field course assistant "Meteoritics and Impact crater, Nördlingen" 5 days**
University of Bern, Switzerland

12. Active memberships in scientific societies

German Mineralogical Society (DMG)
International Meteoritical Society

13. Internships and Workshops

2015 **"Short Course in Advanced Surface Analysis in the Earth, Environmental and Life Sciences; SIMS, NanoSIMS and La-ICP-MS"**
University of Lausanne, Switzerland

2014 **"Secondary Ion Mass Spectrometry" course on a Cameca 1280-HR**
GeoForschungsZentrum Potsdam, Germany

2011 **Internship GFZ Potsdam, "Chemistry and Physics of the Earth Materials"**
Advisors: Dr. K. Marquardt, Prof. W. Heinrich

Münster 2024