

Lutz Nasdala

List of Publications by Year in descending order

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75
papers

9,410
citations

117625

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85541

71
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77
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77
docs citations

77
times ranked

6205
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | PleÅšovice zircon â€” A new natural reference material for Uâ€”Pb and Hf isotopic microanalysis. <i>Chemical Geology</i> , 2008, 249, 1-35. | 3.3 | 3,858 |
| 2 | Further Characterisation of the 91500 Zircon Crystal. <i>Geostandards and Geoanalytical Research</i> , 2004, 28, 9-39. | 1.9 | 1,142 |
| 3 | Zircon M257 â€” a Homogeneous Natural Reference Material for the Ion Microprobe Uâ€”Pb Analysis of Zircon. <i>Geostandards and Geoanalytical Research</i> , 2008, 32, 247-265. | 3.1 | 591 |
| 4 | Metamictisation of natural zircon: accumulation versus thermal annealing of radioactivity-induced damage. <i>Contributions To Mineralogy and Petrology</i> , 2001, 141, 125-144. | 3.1 | 350 |
| 5 | The degree of metamictization in zircon: a Raman spectroscopic study. <i>European Journal of Mineralogy</i> , 1995, 7, 471-478. | 1.3 | 237 |
| 6 | Carbonates from the lower part of transition zone or even the lower mantle. <i>Earth and Planetary Science Letters</i> , 2007, 260, 1-9. | 4.4 | 232 |
| 7 | Incomplete retention of radiation damage in zircon from Sri Lanka. <i>American Mineralogist</i> , 2004, 89, 219-231. | 1.9 | 193 |
| 8 | Annealing radiation damage and the recovery of cathodoluminescence. <i>Chemical Geology</i> , 2002, 191, 121-140. | 3.3 | 169 |
| 9 | Occurrence and distribution of â€œmoganiteâ€” in agate/chalcedony: a combined micro-Raman, Rietveld, and cathodoluminescence study. <i>Contributions To Mineralogy and Petrology</i> , 1998, 133, 96-105. | 3.1 | 133 |
| 10 | Radiation damage in zircon. <i>American Mineralogist</i> , 2003, 88, 770-781. | 1.9 | 133 |
| 11 | Microdiamonds from the Saxonian Erzgebirge, Germany: in situ micro-Raman characterisation. <i>European Journal of Mineralogy</i> , 2000, 12, 495-498. | 1.3 | 133 |
| 12 | Long-term stability of alpha particle damage in natural zircon. <i>Chemical Geology</i> , 2005, 220, 83-103. | 3.3 | 93 |
| 13 | Detection of a Ca-rich lithology in the Earth's deep (>300 km) convecting mantle. <i>Earth and Planetary Science Letters</i> , 2005, 236, 579-587. | 4.4 | 90 |
| 14 | Retention of uranium in complexly altered zircon: An example from Bancroft, Ontario. <i>Chemical Geology</i> , 2010, 269, 290-300. | 3.3 | 88 |
| 15 | Heterogeneous metamictization of zircon on a microscale. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 1091-1097. | 3.9 | 82 |
| 16 | On the occurrence and boron isotopic composition of tourmaline in (ultra)high-pressure metamorphic rocks. <i>Journal of the Geological Society</i> , 2009, 166, 811-823. | 2.1 | 78 |
| 17 | The phenomenon of deficient electron microprobe totals in radiation-damaged and altered zircon. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1637-1650. | 3.9 | 78 |
| 18 | A Raman spectroscopic study on the structural disorder of monaziteâ€”(Ce). <i>Mineralogy and Petrology</i> , 2012, 105, 41-55. | 1.1 | 71 |

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|----|--|-----|-----------|
| 19 | Annealing kinetics of radiation damage in zircon. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 249, 225-246. | 3.9 | 67 |
| 20 | Growth zoning and strain patterns inside diamond crystals as revealed by Raman maps. <i>American Mineralogist</i> , 2005, 90, 745-748. | 1.9 | 66 |
| 21 | Laser-induced REE3+ photoluminescence of selected accessory minerals – An “advantageous artefact” in Raman spectroscopy. <i>Chemical Geology</i> , 2015, 415, 1-16. | 3.3 | 64 |
| 22 | Characterization of an early metamorphic stage through inclusions in zircon of a diamondiferous quartzofeldspathic rock from the Erzgebirge, Germany. <i>American Mineralogist</i> , 2003, 88, 883-889. | 1.9 | 63 |
| 23 | Shock-induced growth and metastability of stishovite and coesite in lithic clasts from suevite of the Ries impact crater (Germany). <i>Contributions To Mineralogy and Petrology</i> , 2008, 155, 457-472. | 3.1 | 62 |
| 24 | Spectroscopic 2D-tomography: Residual pressure and strain around mineral inclusions in diamonds. <i>European Journal of Mineralogy</i> , 2004, 15, 931-935. | 1.3 | 57 |
| 25 | Origin of SiO ₂ -rich components in ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 1548-1564. | 3.9 | 57 |
| 26 | Low-temperature Zr mobility: An in situ synchrotron-radiation XRF study of the effect of radiation damage in zircon on the element release in H ₂ O + HCl + SiO ₂ fluids. <i>American Mineralogist</i> , 2006, 91, 1211-1215. | 1.9 | 56 |
| 27 | Evidence for fractional condensation and reprocessing at high temperatures in CH chondrites. <i>Meteoritics and Planetary Science</i> , 2003, 38, 1199-1215. | 1.6 | 54 |
| 28 | Metamorphic ultrahigh-pressure tourmaline: Structure, chemistry, and correlations to P-T conditions. <i>American Mineralogist</i> , 2010, 95, 1-10. | 1.9 | 49 |
| 29 | Zircon M127 – A Homogeneous Reference Material for ⁴⁰ Ar/ ³⁹ K, ²³⁸ U/ ²³⁵ U/ ²³² Th/ ²⁰⁶ Pb Geochronology Combined with Hafnium, Oxygen and, Potentially, Lithium Isotope Analysis. <i>Geostandards and Geoanalytical Research</i> , 2016, 40, 457-475. | 3.1 | 49 |
| 30 | Constraining a SHRIMP U-Pb age: micro-scale characterization of zircons from Saxonian Rotliegend rhyolites. <i>Contributions To Mineralogy and Petrology</i> , 1998, 132, 300-306. | 3.1 | 48 |
| 31 | Factors affecting the Nd ³⁺ (REE ³⁺) luminescence of minerals. <i>Mineralogy and Petrology</i> , 2013, 107, 415-428. | 1.1 | 44 |
| 32 | Age of the Siberian craton crust beneath the northern kimberlite fields: Insights to the craton evolution. <i>Gondwana Research</i> , 2016, 39, 365-385. | 6.0 | 38 |
| 33 | Internal structures and dating of complex zircons from Meissen Massif monzonites, Saxony. <i>Chemical Geology</i> , 1999, 156, 331-341. | 3.3 | 36 |
| 34 | Relevance of Cathodoluminescence for the Interpretation of U-Pb Zircon Ages, with an Example of an Application to a Study of Zircons from the Saxonian Granulite Complex, Germany. , 2000, , 415-455. | | 35 |
| 35 | Effects of natural radiation damage on back-scattered electron images of single crystals of minerals. <i>American Mineralogist</i> , 2006, 91, 1739-1746. | 1.9 | 35 |
| 36 | Isotope-dilution anchoring of zircon reference materials for accurate Ti-in-zircon thermometry. <i>Chemical Geology</i> , 2018, 481, 146-154. | 3.3 | 34 |

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|----|---|-----|-----------|
| 37 | <sc>GZ</sc>7 and <sc>GZ</sc>8 “ Two Zircon Reference Materials for <sc>SIMS</sc> Uâ€Pb Geochronology. <i>Geostandards and Geoanalytical Research</i> , 2018, 42, 431-457. | 3.1 | 32 |
| 38 | Radio-colouration of diamond: a spectroscopic study. <i>Contributions To Mineralogy and Petrology</i> , 2013, 165, 843-861. | 3.1 | 31 |
| 39 | The nature of radiohaloes in biotite: Experimental studies and modeling. <i>American Mineralogist</i> , 2001, 86, 498-512. | 1.9 | 30 |
| 40 | Helium irradiation study on zircon. <i>Contributions To Mineralogy and Petrology</i> , 2011, 161, 777-789. | 3.1 | 30 |
| 41 | Gordaite [Zn ₄ Na(OH) ₆ (SO ₄)Cl ₆ H ₂ O]; second occurrence in the Juan de Fuca Ridge, and new data. <i>American Mineralogist</i> , 1998, 83, 1111-1116. | 1.9 | 26 |
| 42 | A photoluminescence study of REE ³⁺ emissions in radiation-damaged zircon. <i>American Mineralogist</i> , 2015, 100, 1123-1133. | 1.9 | 26 |
| 43 | Ca-rich majorite derived from high-temperature melt and thermally stressed hornblende in shock veins of crustal rocks from the Ries impact crater (Germany). <i>Contributions To Mineralogy and Petrology</i> , 2011, 161, 275-291. | 3.1 | 25 |
| 44 | On the breakdown of zircon upon “œdry” thermal annealing. <i>Mineralogy and Petrology</i> , 2009, 97, 129-138. | 1.1 | 24 |
| 45 | Application of Raman-based images in the Earth sciences. <i>Springer Series in Optical Sciences</i> , 2012, , 145-187. | 0.7 | 24 |
| 46 | Raman study of radiation-damaged zircon under hydrostatic compression. <i>Physics and Chemistry of Minerals</i> , 2008, 35, 597-602. | 0.8 | 23 |
| 47 | Luminescence techniques in Earth Sciences. , 0, , 43-91. | | 23 |
| 48 | In situ microâ€Raman and Xâ€ray diffraction study of diamonds and petrology of the new ureilite UAE 001 from the United Arab Emirates. <i>Meteoritics and Planetary Science</i> , 2008, 43, 1127-1136. | 1.6 | 22 |
| 49 | Electron-beam-induced annealing of natural zircon: a Raman spectroscopic study. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 389-401. | 0.8 | 22 |
| 50 | Review of effects of radiation damage on the luminescence emission of minerals, and the example of He-irradiated CePO ₄ . <i>Mineralogy and Petrology</i> , 2013, 107, 441-454. | 1.1 | 21 |
| 51 | Blue Zircon from Ratanakiri, Cambodia. <i>Journal of Gemmology</i> , 2018, 36, 112-132. | 0.2 | 20 |
| 52 | 15. Spectroscopic methods applied to zircon. , 2003, , 427-468. | | 19 |
| 53 | Alteration and chemical U-Th-total Pb dating of heterogeneous high-uranium zircon from a pegmatite from the Aduiskii massif, middle Urals, Russia. <i>Mineralogy and Petrology</i> , 2017, 111, 475-497. | 1.1 | 18 |
| 54 | Irradiation effects in monaziteâ€“(Ce) and zircon: Raman and photoluminescence study of Au-irradiated FIB foils. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 855-871. | 0.8 | 18 |

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|----|---|-----|-----------|
| 55 | The absence of metamictisation in natural monazite. <i>Scientific Reports</i> , 2020, 10, 14676. | 3.3 | 18 |
| 56 | Using Mg as a Proxy for Crystal Structure and Sr as an Indicator of Marine Growth in Vaterite and Aragonite Otoliths of Aquaculture Rainbow Trout. <i>Transactions of the American Fisheries Society</i> , 2009, 138, 1157-1165. | 1.4 | 17 |
| 57 | Chemical alteration patterns in metamict fergusonite. <i>European Journal of Mineralogy</i> , 2010, 22, 425-433. | 1.3 | 15 |
| 58 | <sc>GGR</sc> Biennial Critical Review: Analytical Developments Since 2010. <i>Geostandards and Geoanalytical Research</i> , 2012, 36, 337-398. | 3.1 | 15 |
| 59 | Retention of radiation damage in zircon xenocrysts from kimberlites, Northern Yakutia. <i>Lithos</i> , 2014, 206-207, 252-261. | 1.4 | 15 |
| 60 | Raman study of diamond-based abrasives, and possible artefacts in detecting UHP microdiamond. <i>Lithos</i> , 2016, 265, 317-327. | 1.4 | 15 |
| 61 | Crystal-structure properties and the molecular nature of hydrostatically compressed realgar. <i>Physics and Chemistry of Minerals</i> , 2012, 39, 399-412. | 0.8 | 12 |
| 62 | Crystal structure of Zn ₄ Na(OH)6SO ₄ Cl·6H ₂ O. <i>Journal of Chemical Crystallography</i> , 1997, 27, 325-329. | 1.1 | 11 |
| 63 | The parisite-(Ce) enigma: challenges in the identification of fluorocarbonate minerals. <i>Mineralogy and Petrology</i> , 2021, 115, 1-19. | 1.1 | 11 |
| 64 | Shock-induced formation of kyanite (Al ₂ SiO ₅) from sillimanite within a dense metamorphic rock from the Ries crater (Germany). <i>Contributions To Mineralogy and Petrology</i> , 2004, 148, 150-159. | 3.1 | 10 |
| 65 | Effects of irradiation damage on the back-scattering of electrons: Silicon-implanted silicon. <i>American Mineralogist</i> , 2007, 92, 1768-1771. | 1.9 | 9 |
| 66 | Spectroscopic study of inclusions in gem corundum from Mercaderes, Cauca, Colombia. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 221-233. | 0.8 | 6 |
| 67 | Photoluminescence of synthetic titanite-group pigments: A rare quenching effect. <i>Chemie Der Erde</i> , 2014, 74, 419-424. | 2.0 | 5 |
| 68 | Majoritic garnet grains within shock-induced melt veins in amphibolites from the Ries impact crater suggest ultrahigh crystallization pressures between 18 and 9 ÅGPa. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1. | 3.1 | 5 |
| 69 | Neoproterozoic amorphous åœœkaniteåœœ (Ca ₂ Th _{0.9} U _{0.1} Si ₈ O ₂₀) from Okkampitiya, Sri Lanka: A metamict gemstone with excellent lead-retention performance. <i>Geology</i> , 2017, 45, 919-922. | 4.4 | 5 |
| 70 | Dry annealing of radiation-damaged zircon: Single-crystal X-ray and Raman spectroscopy study. <i>Lithos</i> , 2021, 406-407, 106523. | 1.4 | 5 |
| 71 | Phase Decomposition upon Alteration of Radiation-Damaged Monazite-(Ce) from Moss, Åstfold, Norway. <i>Chimia</i> , 2010, 64, 705-711. | 0.6 | 4 |
| 72 | Luminescence spectroscopy and imaging: analytical advances and perspectives in the Earth sciences and related disciplines. <i>Mineralogy and Petrology</i> , 2013, 107, 349-351. | 1.1 | 2 |

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|----|---|-----|-----------|
| 73 | Unusual paired pattern of radiohaloes on a diamond crystal from Guaniamo (Venezuela). <i>Lithos</i> , 2016, 265, 177-181. | 1.4 | 1 |
| 74 | RESOLVING LARGE MAGNITUDE AND WIDESPREAD ANNEALING OF LUNAR ZIRCON THROUGH CORRELATIVE SIMS, EBSD AND RAMAN SPECTROSCOPY. , 2017, , . | | 1 |
| 75 | ⁴ He irradiation of zircon, ZrSiO ₄ , using a micro-patterned, Si-based energy filter. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 443, 38-42. | 1.4 | 1 |