

List of publications where the data obtained with ISTerre MICROANALYSIS Facility were published:

2018 (9 submitted and accepted)

- Cordier C., Coin K., Arndt T. N., Cartigny P. The Älggliden Ni-Cu-Au deposit: magmatic sllides in a subduction setting. *Submitted to Mineralium Deposita*.
- Kaduri, M., Gratier, J.-P., Lasserre, C., Çakir, Z., Renard, F. (2018, in press) Quantifying the Partition Between Seismic and Aseismic Deformation Along Creeping and Locked Sections of the North Anatolian Fault, Turkey. *Pure and Applied Geophysics*, <https://doi.org/10.1007/s00024-018-2027-2>.
- Sobolev A.V., Asafov E.V., Gurenko A.A., Arndt N.T., Batanova V.G., Portnyagin M.V., Garbe-Schönberg D, Wilson A.H. and Byerly G.R. Deep hydrous mantle reservoir provides evidence for crustal recycling before 3.3 Gyr ago, submitted to *Nature*, under review.
- Airaghi, L., Janots, E., Lanari, P., de Sigoyer, J., Magnin, V. Allantite petrochronology in fresh and retrogressed garnet-biotite metapelites from the Longmen Shan (eastern Tibet). Under review *Journal of Petrology*.
- Airaghi, L., de Sigoyer, Guillot, S., Robert, A., Warren, C.J., Deldicque, D. The Mesozoic along-strike tectono-metamorphic segmentation of Longmen Shan (eastern Tibetan plateau). Under review, *Tectonics*.
- Pilitsyna A., Tretyakov A., Degtyarev K., Salnikova E., Kotov A., Kovach V., Kuo-Lung Wang, Batanova V., Plotkina Y., Tolmacheva E., Ermolaev B., Hao-Yang Lee, 2018. Early Palaeozoic metamorphism of Precambrian crust in the Zheltau terrane (Southern Kazakhstan; Central Asian Orogenic belt): P-T paths, protoliths, zircon dating and tectonic implications. *Lithos*, Accepted (31st of October, 2018).
- Merkulova M., Murdzek M., Mathon O., Glatzel P., Batanova V., and Manceau A. 2018. Evidence for syngenetic micro-inclusions of As³⁺- and As⁵⁺-containing Cu sulfides in hydrothermal pyrite. *American Mineralogist*, accepted
- Batanova V.G., Thompson J.M., Danyushevsky L.V., Portnyagin M.V., Garbe-Schönberg D., Hauri E., Kimura J-I., Chang Q., Senda R., Goemann K., Chauvel C., Campillo S. , Ionov D. and Sobolev A.V. New Olivine reference material for in-situ microanalysis. Submitted to *Geostandard and Geoanalytical Researches* 19 Sept 2018.
- Marrocchi Y., Euverte, R., Villeneuve J., Batanova V., Welsch B., Ferrière L., Jacquet E., Formation of CV chondrules by recycling of amoeboid olivine aggregate-like precursors. *Geochimica et Cosmochimica Acta*. under review

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- Pilitsyna A., Tretyakov A., Degtyarev K., Salnikova E., Kotov A., Kovach V., Kuo-Lung Wang, Batanova V., Plotkina Y., Tolmacheva E., Ermolaev B., Hao-Yang Lee, 2019. Early Palaeozoic metamorphism of Precambrian crust in the Zheltau terrane (Southern Kazakhstan; Central Asian Orogenic belt): P-T paths, protoliths, zircon dating and tectonic implications. *Lithos*, 324-325, p. 115-140 .
- Baecker B., Ott U., Cordier C., Folco L., Trierloff M., van Ginneken M., Rochette P. (2018) Noble gases in micrometeorites from the Transantarctic Mountains. *Geochimica et Cosmochimica Acta*, 242, 266-297. <https://doi.org/10.1016/j.gca.2018.08.027>
- Cordier C., Baecker B., Ott U., Folco L., Trierloff M. (2018) A new type of oxidized and pre-irradiated micrometeorite. *Geochimica et Cosmochimica Acta*, 233, 135-158. <https://doi.org/10.1016/j.gca.2018.04.010> (Thanks to V. Batanova)
- Pilitsyna A., A. Tretyakov, K. Degtyarev, T. Alifirova, **V. Batanova**, S. Cuthbert, E. Kovalchuk, B. Ermolaev, 20018. Multi-stage metamorphic evolution and protolith reconstruction of spinel-bearing and symplectite-bearing ultramafic rocks in the Zheltau massif, Southern Kazakhstan (Central Asian Orogenic Belt). *Gondwana Research* 64, 11-34. <https://doi.org/10.1016/j.gr.2018.06.005>

- Prigent C., Agard P., Guillot S., Godard M., Dubacq B. 2018. Mantle wedge deformation during subduction infancy: evidence from the base of the Semail ophiolitic mantle. *Journal of Petrology* doi.org/10.1093/petrology/egy090, **(thanks to V. Batanova and V. Magnin)**
- Manceau A, Merkulova M, Murdzek M, **Batanova V**, Baran R, Glatzel P, Saikia BK, Paktunc D, Lefticariu L. 2018. Chemical Forms of Mercury in Pyrite: Implications for Predicting Mercury Releases in Acid Mine Drainage Settings. *Environmental Science & Technology* 52(18):10286-10296 doi:10.1021/acs.est.8b02027
- Sobolev NV, Sobolev AV, Tomilenko AA, Kuz'min DV, Grakhanov SA, **Batanova VG**, Logvinova AM, Bul'bak TA, Kostrovitskii SI, Yakovlev DA, Fedorova EN, Anastasenko GF, Nikolenko EI, Tolstov AV, Reutskii VN (2018) Prospects of search for diamondiferous kimberlites in the northeastern Siberian Platform. *Russian Geology and Geophysics* 59(10):1365-1379 doi:10.1016/j.rgg.2018.09.012
- Chayka IF, Izokh AE, Sobolev AV, **Batanova VG**. 2018. Low-Titanium Lamproites of the Ryabinoviy Massif (Aldan Shield): Crystallization Conditions and Lithospheric Source. *Doklady Earth Sciences* 481(2):1008-1012 doi:10.1134/s1028334x18080020
- Marrocchi Y., Villeneuve J., **Batanova V.**, Piani L. and Jacquet E. 2018 Oxygen isotopic diversity of chondrule precursors and the nebular origin of chondrules, *EPSL*, **496**, 132-141
- Airaghi, L, Warren, C.J., de Sigoyer, J., Lanari, P., **Magnin, V.** Influence of dissolution/reprecipitation reactions on metamorphic greenschist to amphibolite-facies mica $^{40}\text{Ar}/^{39}\text{Ar}$ ages in the Longmen Shan (eastern Tibet). *Journal of Metamorphic Geology*. <https://doi-org.insu.bib.cnrs.fr/10.1111/jmg.12420>
- Gazel E., Treka J., Bizimis M., Sobolev A., **Batanova V.**, Class C., Jicha B., Long-lived source heterogeneities in the Galapagos mantle plume, *G-Cubed (Geochemistry, Geophysics, Geosystems)*. 2018. <https://doi.org/10.1029/2017GC007338>
- Loury C., Rolland Y., Lanari, P., Guillot S., Bosch D., Ganino C., Jourdon, A., Petit C., Gallet S., Monié P., Riel N. 2018. Permian charnockites in Pobeda area : implications for Tarim mantle plume activity and HT metamorphism in the South Tien Shan range. *Lithos*, **304-307**, 135-154. **(Thanks to V. Magnin)**
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- Anne-Marie Boullier, Odile Robach, Benoît Ildefonse, Fabrice Barou, David Mainprice, Tomoyuki Ohtani, and Koichiro Fujimoto. 2018 High stresses stored in fault zones: example of the Nojima fault (Japan). *Solid Earth (SE)*, **9**, 505-529, <https://doi.org/10.5194/se-9-505-2018> **(thanks to V. Batanova and V. Magnin)**
- Asafov E.V., Sobolev A.V., Gurenko A.A., Arndt N.T., **Batanova V.G.**, Portnyagin M.V., Garbe-Schönberg D., Krasheninnikov S.P. 2018. Belingwe komatiites (2.7 Ga) originate from a plume with moderate water content, as inferred from inclusions in olivine. *Chemical Geology*, **478**, 39-59, <https://doi.org/10.1016/j.chemgeo.2017.11.002> **(Thanks to V. Magnin)**
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- Airaghi L., de Sigoyer J., Lanari P., Vidal O., Guillot S., Monie P., Sautter B., Xibin Tan. 2017. Total exhumation across the Beichuan fault in the Longmen Shan, Sichuan, (eastern Tibetan plateau, China): constraints from petrology and thermobarometry. *Journal of Asian Earth Sciences*, **140**, 108-121 (Thanks to **V. Magnin** and **V. Batanova**)
- Batanova V.G.**, Sobolev A.V. and **Magnin V.** 2017. Trace element analysis in EPMA: current state and perspectives. In *Book of Tutorials and Abs. EMAS/IUMAS, Modern developments and applications in microbeam analysis, invited lecture*, p55-73
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- Kaduri M., Gratier J-P, Renard F, Cakire Z and C. Lasserre. 2017. The implication of fault zone transformation on fault aseismic creep: example from the North Anatolian Fault, Turkey. *JGR*, DOI: 10.1002/2016JB013803 (Thanks to **V. Magnin** and **V. Batanova**)
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- Trela, J., Gazel, E., Moore, L., Sobolev, A., Bizimis, M., Jicha B, and **Batanova V.** 2017. The hottest lavas of the Phanerozoic and the survival of deep Archean reservoirs. *Nature Geosciences*, **10**, 451-456
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