

**PUBLICATIONS**  
**Hélène BUREAU**

*Publications de rang A*

C. McCammon, H. Bureau, H.J. Cleaves, E. Cottrell, S.M. Dorfman, L.H. Kellogg, J. Li, S. Mikhail, Y. Moussallam, C. Sanloup, A. Thomson, A. Vitale-Brovarone (2019) Deep Earth Carbon Reactions Through Time and Space, *American Mineralogist*, DOI : <https://doi.org/10.2138/amam-2020-6888CCBY>.

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D. Lévy, J. Aléon, A. Aléon-Toppani, D. Troadec, R. Duhamel, A. Gonzalez-Cano, H. Bureau, H. Khodja (2019) NanoSIMS imaging of D/H ratios on FIB sections. *Analytical Chemistry* DOI: 10.1021/acs.analchem.9b03134.

E. Balan, L. Créon, C. Sanloup, J. Aléon, M. Blanchard, L. Paulatto, H. Bureau (2019) First-principles modeling of chlorine isotope fractionation between chloride-bearing molecules and minerals. *Chemical Geology*. 525, 424-434.

C. Leroy, H. Bureau, C. Sanloup, C. Raepsaet, K. Glazirin, P. Munsch, M. Harmand, G. Prouteau, H. Khodja (2019) Xenon and iodine behaviors in magmas. *Earth and Planetary Sciences Letters* 522, 144-154.

V. Malavergne, H. Bureau, C. Raepsaet, F. Gaillard, M. Poncet, S. Surblé, D. Sifré, S. Shcheka, C. Fourdrin, D. Deldicque, H. Khodja., (2018), Experimental constraints on the fate of H and C during planetary core-mantle differentiation. Implications for the Earth. *Icarus*, 321, 473-485.

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N. Bolfan-Casanova, F. Schiavi, C. Raepsaet, D. Novella, H. Bureau, H. Khodja, S. Demouchy (2018) Examination of water quantification, and incorporation in transition zone minerals : wadsleyite, ringwoodite and phase D using ERDA (Elastic Recoil Detection analysis). *Front. Earth Sci.* | doi: 10.3389/feart.2018.00075.

V. Clesi, M. A. Bouhifd, N. Bolfan-Casanova, G. Manthilake, F. Schiavi, C. Raepsaet, H. Bureau, H. Khodja, D. Andrault (2018) Low hydrogen contents in the cores of terrestrial planets. *Sci. Adv.* 4, e1701876.

L. Creon, G. Levresse, L. Remusat, H. Bureau, G. Carrasco-Nunez (2018) New method for initial composition determination of crystallized silicate melt inclusions. *Chemical Geology* doi:10.1016/j.chemgeo.2018.02.038

C. Leroy, C. Sanloup, H. Bureau, B.C. Schmidt, Z. Konôpkova, C. Raepsaet, (2018) Bonding of xenon to oxygen in magmas at depth. *Earth and Planetary Sciences Letters* 484, 103-110

M. Roberge, H. Bureau, N. Bolfan-Casanova, D. Frost, C. Raepsaet, S. Surble, H. Khodja, A.L. Auzende, P. Cordier, G. Fiquet. (2017) Chlorine in wadsleyite and ringwoodite: an experimental study, *Earth and Planetary Sciences Letters*, 467, 99-107.

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T. Kawamoto, K. Mibe, H. Bureau, S. Reguer, C. Mocuta, S. Kubsky, D. Thiaudière, S. Ono, T. Kogiso (2014) Large-ion lithophile elements delivered by saline fluids to the sub-arc mantle. *Earth, planets and Space*, 66:61, doi:10.1186/1880-5981-66-61.

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### *Chapitres d'ouvrages*

Shirey, S.B., Pearson, D.G., Walter, M.J., Aulbach, S., Brenker, F.E., Bureau, H., Burnham, A.D., Cartigny, P., Chacko, T., Frost, D.J., Hauri, E.H., Jacob, D.E., Jacobsen, S.D., Kohn, S.C., Luth, R.W., Mikhail, S., Navon, O., Nestola, F., Nimis, P., Smit, K.V., Smith, E.N., Stachel, T., Stagno, V., Steele, A., Thomassot, E., Thomson, A.R., Weiss, Y. 2019. **Diamonds and the Mantle Geodynamics of Carbon: Deep Mantle Carbon Evolution from the Diamond Record**. In Orcutt, B., Daniel, I., and Dasgupta, R. (Eds.) Deep Carbon: Past to Present. Cambridge University Press.

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### *Brevets*

Brevet International : « **Cellule à enclumes, notamment susceptible de fonctionner en mode dynamique** » numéro WO 2012/020390 publié le 16/02/2012, S. Kubsky (synchrotron SOLEIL) – H. Bureau (IMPMP)

### *Mémoires*

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