

To report atom probe tomography data that was reconstructed using these values, please cite: Fougere, D., Saxey, D.W., Rickard, W.D.A., Reddy, S.M., Verberne, R. Standardizing spatial reconstruction parameters for the atom probe analysis of common minerals. *Microscopy and Microanalysis*, DOI: 10.1017/S1431927621013714

	Laser Power Energy (pJ)	Base Temperature (K)	Atomic volume nm <sup>3</sup> /atom	Fitted Field (V/nm)	Uncertainty (1 $\sigma$ )
Olivine	200	60	0.01095	30.04	0.59
Pyrite	35	60	0.01325	19.10	0.69
Baddeleyite	150	60	0.01133	29.08	0.36
Monazite	300	60	0.01245	27.02	0.22
Apatite	300	60	0.01250	27.87	-
Pagioclase	300	60	0.01290	34.20	0.51
Titanite	300	60	0.01152	23.68	0.73
Garnet	400	60	0.00895	28.92	0.38
Xenotime	200	60	0.01190	28.98	0.20
Arsenopyrite	35	60	0.01458	20.20	0.12
Rutile	30	60	0.01040	25.85	0.06
Zircon <sup>1</sup>	300	60	0.01076	32.00	-
Sphalerite	30	30	0.01976	16.96	0.04
Corundum	300	60	0.00847	34.18	0.47

1: Saxey, D., Fougere, D., Rickard, W., and Reddy, S. (2019) Spatial Reconstruction of Atom Probe Data from Zircon. *Microscopy and Microanalysis*, 25(S2), 2536-2537.