

Supplementary Table S9. Baseline model performance for differentiation rate prediction.

(A) Shooting rate

Model	Cross-validation R^2	Test R^2	RMSE
SVR (RBF)	-2.32	0.61	0.05
Gradient Boosting	-1.80	0.60	0.05
Extra Trees	-1.70	0.59	0.05

(B) Rooting rate

Model	Cross-validation R^2	Test R^2	RMSE
Extra Trees	0.46	0.78	0.15
Decision Tree	0.32	0.78	0.15
Random Forest	0.53	0.77	0.15

Note: R^2 , coefficient of determination; RMSE, root mean square error. Higher R^2 and lower RMSE indicate superior predictive performance.