

**Tabla 5.** Modelos de *boosting* que mostraron el mejor desempeño en la predicción de capacidad de biosorción de Cd(II).

Algoritmo de Boosting	Hiperparámetro	Modelo		
		1	2	3
AdaBoost	n_estimators	265	302	325
	learning_rate	0.0504	0.0277	0.0352
	max_depth	9	8	8
	min_samples_split	9	9	9
	min_samples_leaf	1	1	1
CatBoost	Iterations	321	389	343
	depth	4	4	4
	learning_rate	0.1264	0.1349	0.1467
	random_strength	27	70	35
	bagging_temperature	4.4238	8.5859	4.2887
Gradient Boosting	n_estimators	358	382	373
	max_depth	3	3	3
	learning_rate	0.2924	0.2923	0.2928
	min_samples_split	10	10	10
	min_samples_leaf	2	2	2
LightGBM	n_estimators	209	228	243
	num_leaves	4	4	4
	subsample	0.4259	0.4843	0.5344
	colsample_bytree	0.9066	0.9546	0.9513
	min_child_samples	3	3	3
	learning_rate	0.2995	0.2995	0.2850
XGBoost	n_estimators	319	332	313
	lambda	6.5180	4.7024	9.0538
	max_depth	5	5	5
	eta	0.3454	0.2202	0.2027