Supplementary Information for

A compositional feature-driven prediction model for the emission wavelength of Eu²⁺-doped whitlockite-type phosphors coupled with a material design framework

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Table S1 | Hyperparameter settings for machine learning models

model	hyperparameter	value
SVR	C	50
	degree	3
	gamma	0.2
	epsilon	0.05
DTR	max_depth	7
	random_state	47
Xgboosting	random_state	47
	n_estimators	30
	max_depth	8
	learning_rate	0.1
	iterations	160
Catboosting	learning_rate	0.12
	depth	8
	random_seed	42
GBR	n_estimators	200
	random_state	53
	learning_rate	0.09
	n_estimators	100
	max_samples	0.8
	random_state	47
Stacking	C	10
	degree	2
	gamma	0.001
	epsilon	0.01
Adaboosting	n_estimators	170
	learning_rate	0.09
	random_state	14
Bagging	max_depth	19

	random_state	41
	n_estimators	100
	max_samples	0.9
	n_estimators	120
RFR	max_depth	18
	random_state	54