ID	name	RMSE	MAE	ME	$\mathbb{R}^2$	m	au	ES
hmz0n	cosmotherm_FINE19	0.38 [0.23, 0.55]	0.31 [0.19, 0.46]	-0.17 [-0.38, 0.03]	0.77 [0.36, 0.94]	0.94 [0.60, 1.15]	0.64 [0.17, 0.96]	1.15 [0.92, 1.33]
gmoq5	Global XGBoost-Based QSPR LogP Predictor	0.39 [0.28, 0.48]	0.34 [0.23, 0.45]	0.01 [-0.22, 0.25]	0.74 [0.38, 0.92]	0.99 [0.67, 1.33]	0.59 [0.11, 0.89]	0.69 [0.39, 1.01]
3vqbi	cosmoquick_TZVP18+ML	0.41 [0.28, 0.53]	0.36 [0.24, 0.48]	-0.08 [-0.30, 0.17]	0.66 [0.26, 0.93]	0.78 [0.49, 1.10]	0.56 [0.11, 0.88]	1.06 [0.86, 1.26]
j8nwc	EC_RISM_wet_P1w+2o	0.47 [0.17, 0.75]	0.31 [0.15, 0.55]	0.07 [-0.15, 0.38]	0.74 [0.33, 0.97]	1.14 [0.85, 1.37]	0.81 [0.44, 1.00]	1.31 [1.01, 1.46]
sq07q	Local XGBoost-Based QSPR LogP Predictor	0.47 [0.33, 0.58]	0.41 [0.28, 0.54]	0.03 [-0.24, 0.31]	0.64 [0.21, 0.89]	0.92 [0.50, 1.30]	0.56 [0.11, 0.88]	0.60 [0.31, 0.94]
dqxk4 xxh4i	$LogP\_SMD\_Solvation\_DFT$ $SM12-Solvation-Trained$	0.49 [0.34, 0.62] 0.49 [0.34, 0.62]	0.42 [0.26, 0.57] 0.43 [0.29, 0.58]	0.30 [0.06, 0.52] 0.18 [-0.09, 0.44]	0.69 [0.37, 0.91] 0.54 [0.14, 0.86]	0.83 [0.50, 1.25] 0.60 [0.28, 1.03]	0.67 [0.27, 0.96] 0.51 [0.00, 0.88]	1.13 [0.94, 1.32] 1.41 [1.35, 1.46]
hdpuj	RayLogP-II, a cheminformatic QSPR model predic	0.49 [0.37, 0.60]	0.44 [0.32, 0.57]	-0.29 [-0.51, -0.05]	0.74 [0.39, 0.94]	1.02 [0.68, 1.36]	0.67 [0.22, 1.00]	0.91 [0.70, 1.12]
vzgyt	rfs-logp	0.50 [0.27, 0.68]	0.38 [0.20, 0.58]	-0.35 [-0.57, -0.15]	0.72 [0.30, 0.95]	0.76 [0.48, 0.98]	0.64 [0.25, 0.92]	1.17 [0.92, 1.39]
ypmr0	SM8-Solvation	0.50 [0.36, 0.63]	0.44 [0.31, 0.58]	0.07 [-0.23, 0.36]	0.61 [0.25, 0.88]	0.93 [0.53, 1.47]	0.64 [0.24, 0.92]	1.48 [1.46, 1.49]
yd6ub	S + log P	0.51 [0.32, 0.65]	0.41 [0.23, 0.59]	0.09 [-0.21, 0.38]	0.63 [0.21, 0.89]	0.99 [0.48, 1.41]	0.53 [-0.02, 0.87]	0.73 [0.36, 1.09]
7egyc	SMD-Solvation-Trained	0.52 [0.35, 0.67]	0.44 [0.29, 0.61]	0.27 [0.01, 0.53]	0.57 [0.22, 0.85]	0.50 [0.32, 0.76]	0.45 [0.06, 0.80]	1.45 [1.41, 1.48]
0a7a8	ML Prediction using MD Feature Vector Trained	0.53 [0.34, 0.68]	0.43 [0.25, 0.61]	0.32 [0.06, 0.56]	0.62 [0.12, 0.90]	0.74 [0.33, 1.02]	0.45 [-0.16, 0.84]	1.01 [0.73, 1.25]
REF11	$\log P(o/w)$ (MOE)	0.54 [0.25, 0.80]	0.39 [0.19, 0.63]	0.19 [-0.10, 0.50]	0.59 [0.36, 0.89]	0.90 [0.37, 1.62]	0.67 [0.35, 0.96]	0.07 [-0.00, 0.34]
7dhtp	LogP-prediction-method-name	0.54 [0.33, 0.71]	0.44 [0.26, 0.63]	0.06 [-0.26, 0.36]	0.49 [0.06, 0.88]	0.73 [0.27, 1.15]	0.56 [0.04, 0.96]	0.50 [0.19, 0.83]
qyzjx REF13	EC_RISM_dry_P1w+2o SlogP (MOE)	0.54 [0.34, 0.74] 0.55 [0.37, 0.71]	0.46 [0.31, 0.64] 0.47 [0.31, 0.65]	-0.15 [-0.41, 0.19] -0.27 [-0.55, 0.02]	0.73 [0.30, 0.97] 0.69 [0.31, 0.93]	1.22 [0.87, 1.48] 1.06 [0.54, 1.55]	0.78 [0.44, 1.00] 0.60 [0.10, 0.96]	1.22 [1.02, 1.36] 0.01 [-0.00, 0.16]
w6jta	ML Prediction using MD Feature Vector Trained	0.56 [0.32, 0.76]	0.46 [0.27, 0.66]	0.32 [0.05, 0.60]	0.53 [0.13, 0.90]	0.62 [0.35, 0.86]	0.51 [0.02, 0.88]	1.12 [0.86, 1.34]
REF10	h_logP (MOE)	0.60 [0.38, 0.83]	0.51 [0.33, 0.72]	-0.04 [-0.42, 0.29]	0.38 [0.01, 0.82]	0.65 [-0.04, 1.21]	0.35 [-0.27, 0.80]	0.02 [-0.00, 0.14]
5krdi	ZINC15 versus PM3	0.60 [0.39, 0.82]	0.51 [0.33, 0.71]	-0.30 [-0.61, 0.00]	0.63 [0.24, 0.91]	1.03 [0.59, 1.50]	0.60 [0.15, 0.92]	0.37 [0.09, 0.64]
REF12	$MoKa\_logP$	0.60 [0.41, 0.76]	0.52 [0.35, 0.70]	-0.08 [-0.43, 0.26]	0.67 [0.23, 0.90]	1.21 [0.76, 1.53]	0.55 [0.08, 0.88]	-0.00 [-0.00, 0.01]
ji2zm	SM8-Solvation-Trained	0.60 [0.43, 0.74]	0.53 [0.37, 0.69]	0.45 [0.21, 0.67]	0.66 [0.31, 0.90]	0.66 [0.43, 0.97]	0.51 [0.11, 0.84]	1.43 [1.39, 1.47]
gnxuu	ML Prediction using MD Feature Vector Trained	0.61 [0.39, 0.80]	0.51 [0.31, 0.71]	0.40 [0.13, 0.67]	0.53 [0.12, 0.92]	0.57 [0.32, 0.80]	0.51 [0.04, 0.88]	1.10 [0.87, 1.31]
tc4xa	NHLBI-NN-5HL	0.62 [0.40, 0.80]	0.51 [0.31, 0.72]	0.17 [-0.19, 0.52]	0.66 [0.15, 0.90]	1.21 [0.49, 1.65]	0.49 [-0.02, 0.86]	1.10 [0.88, 1.31]
6cdyo	SM12-Solvation	0.65 [0.42, 0.83] 0.70 [0.48, 0.90]	0.54 [0.33, 0.75]	-0.24 [-0.60, 0.11]	0.52 [0.20, 0.82]	0.93 [0.47, 1.68]	0.53 [0.17, 0.88]	0.78 [0.43, 1.09]
dbmg3 kxsp3	GC-LSER PLS2 from NIST data and QM-generated QSAR Desc	0.70 [0.48, 0.90]	0.60 [0.40, 0.82] 0.62 [0.39, 0.86]	0.42 [0.09, 0.76] 0.48 [0.14, 0.80]	0.47 [0.04, 0.81] 0.36 [0.02, 0.76]	0.75 [0.14, 1.30] 0.54 [0.03, 1.15]	0.38 [-0.18, 0.80] 0.35 [-0.19, 0.79]	1.43 [1.38, 1.47] 0.71 [0.37, 1.05]
nh6c0	Molecular-Dynamics-Expanded-Ensembles	0.74 [0.45, 0.94]	0.67 [0.48, 0.86]	0.09 [-0.34, 0.54]	0.62 [0.16, 0.88]	1.34 [0.52, 1.92]	0.49 [0.04, 0.87]	0.74 [0.49, 0.99]
kivfu	LogP-prediction-method-IEFPCM/MST	0.78 [0.33, 1.08]	0.56 [0.26, 0.90]	-0.03 [-0.52, 0.41]	0.41 [0.03, 0.89]	0.97 [0.26, 1.41]	0.45 [0.00, 0.84]	1.07 [0.74, 1.37]
NULL0	mean clogP of FDA approved oral drugs (1998-2017)	0.79 [0.49, 1.03]	0.66 [0.42, 0.93]	0.42 [0.02, 0.82]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	nan [nan, nan]	-0.00 [-0.00, 0.14]
REF09	clogP (Biobyte)	0.82 [0.52, 1.10]	0.68 [0.43, 0.96]	-0.26 [-0.72, 0.20]	0.46 [0.09, 0.90]	1.09 [0.43, 1.78]	0.48 [-0.04, 0.87]	0.01 [-0.00, 0.17]
ujsgv	Alchemical-CGenFF	0.82 [0.55, 1.06]	0.67 [0.39, 0.95]	-0.31 [-0.75, 0.14]	0.33 [0.01, 0.80]	0.80 [0.00, 1.44]	0.35 [-0.13, 0.77]	1.27 [1.13, 1.39]
wu52s	LogP-PLS-ECFC4_CSsep-Bayer	0.83 [0.58, 1.05]	0.72 [0.49, 0.97]	0.70 [0.43, 0.96]	0.55 [0.11, 0.99]	0.54 [0.24, 0.88]	0.56 [-0.06, 1.00]	0.42 [0.16, 0.74]
5mahv g6dwz	ML Prediction using MD Feature Vector Trained NHLBI-NN-3HL	0.85 [0.42, 1.19] 0.85 [0.57, 1.07]	0.62 [0.31, 0.98] 0.72 [0.45, 0.99]	-0.02 [-0.52, 0.48] 0.35 [-0.12, 0.79]	0.34 [0.03, 0.79] 0.52 [0.09, 0.85]	0.90 [0.30, 1.38] 1.18 [0.50, 1.72]	0.24 [-0.33, 0.72] 0.45 [-0.06, 0.84]	1.07 [0.73, 1.34] 0.84 [0.55, 1.14]
bgeuh	ISIDA-LSER	0.87 [0.51, 1.17]	0.66 [0.34, 1.00]	0.35 [-0.12, 0.79]	0.01 [0.00, 0.53]	-0.05 [-0.43, 0.49]	0.43 [-0.00, 0.84]	1.33 [1.17, 1.44]
d7vth	UFZ-LSER	0.87 [0.62, 1.09]	0.78 [0.56, 1.01]	-0.65 [-0.97, -0.30]	0.63 [0.20, 0.94]	1.11 [0.72, 1.39]	0.49 [0.00, 0.87]	0.77 [0.52, 1.04]
2mi5w	Alchemical-CGenFF	0.95 [0.63, 1.24]	0.81 [0.54, 1.11]	-0.30 [-0.82, 0.25]	0.18 [0.00, 0.64]	0.61 [-0.14, 1.24]	0.24 [-0.22, 0.71]	1.21 [1.04, 1.35]
qz8d5	SMD-Solvation	0.97 [0.70, 1.19]	0.84 [0.56, 1.12]	0.77 [0.42, 1.11]	0.53 [0.17, 0.84]	0.93 [0.47, 1.56]	0.48 [0.06, 0.83]	1.40 [1.34, 1.45]
kuddg	LogP-Pred-MTNN-GraphConv-Bayer	0.97 [0.72, 1.19]	0.89 [0.66, 1.12]	0.89 [0.66, 1.12]	0.67 [0.28, 0.95]	0.71 [0.44, 1.05]	0.53 [-0.04, 0.92]	0.17 [0.02, 0.35]
y0xxd	FS-GM (Fast switching Growth Method)	1.04 [0.43, 1.49]	0.72 [0.32, 1.19]	0.37 [-0.17, 0.97]	0.33 [0.00, 0.92]	1.03 [-0.22, 1.98]	0.42 [-0.14, 0.91]	1.31 [1.13, 1.47]
2ggir	FS-AGM (Fast switching Annihilation/Growth Met	1.04 [0.83, 1.24]	0.98 [0.76, 1.19]	-0.36 [-0.88, 0.27]	0.31 [0.00, 0.93]	0.98 [-0.31, 1.87]	0.49 [0.00, 0.92]	0.83 [0.63, 1.03]
dyxbt mm0jf	B3PW91-TZ SMD set1 LogP-prediction-SMD-HuangLab	1.07 [0.78, 1.35] 1.09 [0.90, 1.23]	0.96 [0.69, 1.25] 1.03 [0.80, 1.22]	0.96 [0.69, 1.25] 1.03 [0.80, 1.22]	0.55 [0.09, 0.90] 0.75 [0.43, 0.98]	0.68 [0.20, 1.15] 0.60 [0.39, 0.82]	0.56 [0.10, 0.92] 0.75 [0.37, 1.00]	-0.00 [-0.00, -0.00] 1.09 [0.99, 1.22]
h83sb	Linear Regression with B3LYP/6-31G+	1.12 [0.59, 1.58]	0.87 [0.49, 1.32]	-0.21 [-0.91, 0.40]	0.00 [0.00, 0.57]	-0.02 [-1.08, 0.84]	-0.16 [-0.68, 0.43]	0.33 [0.07, 0.60]
3wvyh	Alchemical-CGenFF	1.13 [0.48, 1.74]	0.77 [0.35, 1.30]	0.26 [-0.32, 0.95]	0.37 [0.03, 0.93]	1.24 [0.33, 2.27]	0.55 [0.12, 0.95]	1.23 [0.98, 1.41]
f3dpg	PLS from NIST data and QM-generated QSAR Descr	1.17 [0.73, 1.52]	0.92 [0.50, 1.35]	-0.85 [-1.32, -0.38]	0.11 [0.00, 0.46]	0.36 [-0.20, 0.88]	0.15 [-0.33, 0.53]	$0.63 \ [0.25, \ 1.03]$
25s67	FS-AGM (Fast switching Annihilation/Growth Met	1.21 [0.84, 1.54]	1.06 [0.72, 1.42]	-0.97 [-1.39, -0.54]	0.63 [0.15, 0.90]	1.33 [0.40, 2.34]	0.45 [-0.12, 0.88]	0.79 [0.53, 1.08]
zdj0j	Solvation-B3LYP	1.21 [0.98, 1.42]	1.13 [0.86, 1.38]	1.13 [0.86, 1.38]	0.64 [0.25, 0.94]	0.86 [0.41, 1.30]	0.64 [0.17, 0.96]	0.08 [-0.00, 0.31]
7gg6s	MLR from NIST data and QM-generated QSAR Descr	1.27 [0.82, 1.63]	1.00 [0.56, 1.47]	-1.00 [-1.47, -0.56]	0.10 [0.00, 0.44]	0.31 [-0.15, 0.76]	0.16 [-0.32, 0.54]	0.60 [0.23, 0.99]
hwf2k pcv32	Extended solvent-contact model approach Solvation- WB97X-D	1.28 [0.57, 1.91] 1.28 [1.00, 1.53]	0.93 [0.49, 1.51] 1.17 [0.84, 1.47]	-0.09 [-0.91, 0.57] 1.17 [0.84, 1.47]	0.12 [0.00, 0.84] 0.50 [0.13, 0.89]	0.68 [-0.77, 1.63] 0.75 [0.26, 1.39]	0.31 [-0.32, 0.79] 0.44 [-0.06, 0.80]	0.48 [0.24, 0.81] 0.28 [0.02, 0.48]
v2q0t	InterX_GAFF_WET_OCTANOL	1.31 [0.95, 1.65]	1.16 [0.82, 1.51]	-1.15 [-1.51, -0.79]	0.70 [0.26, 0.98]	1.31 [0.92, 1.57]	0.64 [0.15, 1.00]	1.34 [1.24, 1.41]
rdsnw	EC_RISM_wet_P1w+1o	1.32 [0.88, 1.72]	1.15 [0.81, 1.55]	1.15 [0.81, 1.55]	0.78 [0.41, 0.96]	1.51 [1.16, 1.77]	0.75 [0.36, 1.00]	0.98 [0.74, 1.21]
ggm6n	FS-GM (Fast switching Growth Method)	1.32 [0.96, 1.64]	1.16 [0.80, 1.53]	-1.15 [-1.53, -0.77]	0.53 [0.11, 0.84]	1.04 [0.45, 1.66]	0.53 [0.09, 0.84]	1.17 [1.01, 1.32]
jjd0b	MD/S-MBIS-GAFF-TIP3P/MBAR/	1.35 [0.90, 1.74]	1.13 [0.72, 1.57]	-1.09 [-1.56, -0.63]	0.66 [0.22, 0.91]	1.51 [0.81, 2.04]	0.53 [0.00, 0.91]	0.75 [0.46, 1.07]
2tzb0	EC_RISM_dry_P1w+1o	1.38 [0.93, 1.79]	1.21 [0.84, 1.63]	1.21 [0.84, 1.63]	0.79 [0.43, 0.97]	1.58 [1.21, 1.84]	0.75 [0.36, 1.00]	1.00 [0.78, 1.21]
cr3hs	PLS3 from NIST data and QM-generated QSAR Desc	1.39 [0.56, 2.09]	0.96 [0.45, 1.60]	0.80 [0.20, 1.52]	0.40 [0.01, 0.80]	1.36 [-0.14, 2.67]	0.35 [-0.29, 0.84]	0.65 [0.33, 1.00]
arw58	DLPNO-CCSD(T)/cc-pVTZ//B3LYP-D3/cc-pVTZ B3PW91-TZ SMD kcl-wet-oct	1.41 [0.80, 1.90] 1.41 [1.13, 1.69]	1.09 [0.60, 1.64] 1.33 [1.07, 1.62]	1.01 [0.45, 1.61]	0.09 [0.00, 0.55]	-0.24 [-0.74, 0.24] 0.70 [0.24, 1.17]	-0.20 [-0.64, 0.33]	-0.00 [-0.00, -0.00] -0.00 [-0.00, -0.00]
ahmtf o7djk	B3PW91-TZ SMD kci-wet-oct B3PW91-TZ SMD wetoct	1.41 [1.13, 1.69] 1.42 [1.14, 1.70]	1.33 [1.07, 1.62] 1.34 [1.08, 1.62]	1.33 [1.07, 1.62] 1.34 [1.08, 1.62]	0.55 [0.12, 0.89] 0.55 [0.10, 0.89]	$0.70 \ [0.24, \ 1.17] \ 0.70 \ [0.23, \ 1.17]$	0.56 [0.13, 0.92] 0.56 [0.10, 0.92]	-0.00 [-0.00, -0.00]
4p2ph	DLPNO-Solv-ccCA	1.42 [1.14, 1.70]	1.12 [0.60, 1.70]	1.04 [0.46, 1.66]	0.09 [0.00, 0.54]	-0.26 [-0.79, 0.25]	-0.26 [-0.67, 0.29]	-0.00 [-0.00, -0.00]
fmf7r	dice	1.44 [0.61, 1.95]	1.25 [0.84, 1.67]	0.26 [-0.57, 1.09]	0.05 [0.00, 0.54]	0.47 [-0.93, 2.06]	0.10 [-0.50, 0.63]	0.32 [0.05, 0.68]
6fyg5	Solvation-M062X	1.50 [1.27, 1.70]	1.44 [1.18, 1.66]	1.44 [1.18, 1.66]	0.69 [0.31, 0.96]	0.93 [0.49, 1.49]	0.71 [0.28, 1.00]	0.05 [0.00, 0.19]
REF02	YANK-GAFF-TIP3P-wet-oct	1.62 [0.49, 2.64]	0.97 [0.42, 1.84]	-0.83 [-1.76, -0.18]	0.22 [0.01, 0.87]	$1.10 \ [0.10, \ 2.05]$	0.53 [0.11, 0.88]	1.22 [0.95, 1.43]

ID	name	RMSE	MAE	ME	$\mathbb{R}^2$	m	τ	ES
sqosi	MD-AMBER-dryoct	1.69 [1.14, 2.18]	1.42 [0.88, 1.98]	-1.40 [-1.97, -0.85]	0.51 [0.05, 0.87]	1.40 [0.40, 2.03]	0.45 [-0.04, 0.84]	0.72 [0.41, 0.99]
rs4ns	BLYP/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.71 [1.11, 2.23]	1.44 [0.90, 2.00]	1.44 [0.90, 2.00]	0.06 [0.00, 0.49]	-0.19 [-0.70, 0.29]	-0.22 [-0.68, 0.34]	0.07 [-0.00, 0.27]
REF07	YANK-GAFF-tip3p-dry-oct	1.73 [0.46, 2.86]	0.95 [0.32, 1.94]	-0.75 [-1.81, -0.02]	0.22 [0.01, 0.85]	1.23 [0.11, 2.33]	0.49 [0.08, 0.85]	1.23 [0.96, 1.43]
c7t5j	PBE/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.73 [1.14, 2.25]	1.47 [0.95, 2.02]	1.47 [0.95, 2.02]	0.05 [0.00, 0.48]	-0.18 [-0.70, 0.29]	-0.16 [-0.65, 0.40]	-0.00 [-0.00, 0.05]
REF08	YANK-SMIRNOFF-TIP3P-dry-oct	1.74 [0.53, 2.86]	1.05 [0.48, 1.98]	-0.83 [-1.84, -0.11]	0.08 [0.00, 0.69]	0.65 [-0.47, 1.67]	0.31 [-0.17, 0.74]	1.22 [0.94, 1.42]
jc68f	PW91/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.74 [1.13, 2.26]	1.47 [0.94, 2.04]	1.47 [0.94, 2.04]	0.05 [0.00, 0.49]	-0.18 [-0.71, 0.29]	-0.16 [-0.65, 0.40]	-0.00 [-0.00, 0.05]
03суу	Linear Regression-B3LYP/6-311G**	1.75 [0.58, 2.74]	1.11 [0.44, 2.00]	0.03 [-0.88, 1.18]	0.00 [0.00, 0.52]	0.12 [-1.17, 1.48]	0.09 [-0.55, 0.69]	0.36 [0.06, 0.74]
REF05	YANK-SMIRNOFF-TIP3P-wet-oct	1.77 [0.55, 2.86]	1.07 [0.42, 2.00]	-0.97 [-1.93, -0.26]	0.08 [0.00, 0.72]	0.63 [-0.51, 1.69]	0.35 [-0.14, 0.78]	1.18 [0.91, 1.41]
hsotx	B3LYP/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.81 [1.21, 2.32]	1.56 [1.03, 2.12]	1.56 [1.03, 2.12]	0.07 [0.00, 0.48]	-0.19 [-0.67, 0.25]	-0.20 [-0.68, 0.35]	-0.00 [-0.00, 0.01]
ke5gu	MD/S-MBIS-GAFF-SPCE/MBAR/	1.82 [1.31, 2.27]	1.59 [1.07, 2.11]	-1.59 [-2.11, -1.07]	0.62 [0.19, 0.89]	1.54 [0.76, 2.18]	0.53 [0.02, 0.91]	0.49 [0.21, 0.81]
fe8ws	B3PW91/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.83 [1.23, 2.35]	1.58 [1.06, 2.15]	1.58 [1.06, 2.15]	0.06 [0.00, 0.49]	-0.18 [-0.67, 0.27]	-0.16 [-0.65, 0.40]	-0.00 [-0.00, -0.00]
mwuua	MD-LigParGen-wetoct	1.83 [1.47, 2.12]	1.73 [1.38, 2.07]	-1.73 [-2.07, -1.38]	0.41 [0.01, 0.76]	0.67 [0.09, 1.14]	0.48 [0.00, 0.85]	0.49 [0.28, 0.72]
fyx45	LogP-prediction-Drude-FEP-HuangLab	1.85 [0.61, 2.69]	1.25 [0.51, 2.14]	0.65 [-0.33, 1.72]	0.63 [0.14, 0.92]	2.63 [1.02, 3.85]	0.67 [0.12, 1.00]	0.80 [0.45, 1.15]
5t0yn	PBE0/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.85 [1.27, 2.37]	1.61 [1.09, 2.17]	1.61 [1.09, 2.17]	0.06 [0.00, 0.48]	-0.18 [-0.65, 0.27]	-0.16 [-0.64, 0.40]	-0.00 [-0.00, -0.00]
6nmtt	MD-AMBER-wetoct	1.87 [1.34, 2.44]	1.65 [1.16, 2.20]	-1.65 [-2.20, -1.16]	0.42 [0.02, 0.91]	1.10 [0.20, 1.55]	0.60 [0.08, 1.00]	0.57 [0.37, 0.82]
eufcy	MD-LigParGen-dryoct	1.99 [1.61, 2.33]	1.88 [1.49, 2.27]	-1.77 [-2.26, -1.17]	0.54 [0.16, 0.88]	1.43 [0.48, 2.42]	0.66 [0.20, 0.98]	0.41 [0.21, 0.65]
tzzb5	Alchemical-CGenFF	2.12 [1.54, 2.58]	1.87 [1.25, 2.46]	1.43 [0.45, 2.34]	0.20 [0.00, 0.61]	-0.76 [-1.62, 0.25]	-0.20 [-0.61, 0.32]	0.66 [0.37, 0.97]
3oqhx	MD-CHARMM-dryoct	2.14 [1.24, 2.88]	1.64 [0.86, 2.50]	1.11 [0.05, 2.23]	0.03 [0.00, 0.40]	-0.44 [-1.89, 1.01]	0.00 [-0.49, 0.50]	0.75 [0.37, 1.12]
bzeez	FS-AGM (Fast switching Annihilation/Growth Met	2.20 [1.83, 2.51]	2.07 [1.58, 2.47]	-2.07 [-2.47, -1.58]	0.63 [0.17, 0.95]	1.39 [0.77, 2.05]	0.53 [0.00, 0.88]	0.23 [0.06, 0.51]
5svjv	FS-GM (Fast switching Growth Method)	2.26 [1.85, 2.66]	2.14 [1.71, 2.57]	-2.03 [-2.56, -1.38]	0.39 [0.04, 0.90]	1.20 [0.48, 1.76]	0.44 [-0.14, 0.91]	0.74 [0.55, 0.95]
ynquk	TWOVAR	2.26 [1.87, 2.59]	2.13 [1.66, 2.55]	2.13 [1.66, 2.55]	0.08 [0.00, 0.76]	0.25 [-0.26, 0.60]	0.38 [-0.08, 0.80]	1.07 [0.95, 1.20]
odex0	$InterX\_ARROW\_2017\_PIMD\_SOLVENT2\_WET\_OCTANOL$	2.29 [1.63, 2.82]	1.98 [1.30, 2.65]	1.73 [0.82, 2.59]	0.09 [0.00, 0.65]	-0.53 [-1.77, 0.69]	-0.09 [-0.61, 0.49]	1.09 [0.90, 1.28]
padym	$Inter X\_ARROW\_2017\_PIMD\_WET\_OCTANOL$	2.29 [1.64, 2.82]	1.99 [1.30, 2.65]	1.72 [0.78, 2.56]	0.12 [0.00, 0.68]	-0.60 [-1.90, 0.69]	-0.13 [-0.69, 0.47]	1.09 [0.89, 1.28]
pnc4j	LogP-prediction-Drude-Umbrella-HuangLab	2.29 [1.67, 2.86]	2.03 [1.43, 2.65]	2.03 [1.43, 2.65]	0.04 [0.00, 0.65]	0.31 [-0.86, 1.31]	0.20 [-0.38, 0.71]	0.39 [0.17, 0.72]
REF06	YANK-SMIRNOFF-OPC-wet-oct	2.33 [1.20, 3.43]	1.85 [1.16, 2.81]	-1.85 [-2.80, -1.16]	0.13 [0.00, 0.89]	0.82 [-0.48, 1.84]	0.44 [-0.04, 0.84]	0.85 [0.59, 1.08]
REF03	YANK-GAFF-OPC-wet-oct	2.35 [1.20, 3.41]	1.85 [1.11, 2.82]	-1.85 [-2.81, -1.11]	0.13 [0.00, 0.78]	0.85 [-0.70, 2.13]	0.35 [-0.32, 0.84]	0.84 [0.56, 1.10]
REF01	YANK-GAFF-TIP3P-FB-wet-oct	2.40 [1.14, 3.61]	1.82 [1.08, 2.85]	-1.82 [-2.84, -1.08]	0.15 [0.00, 0.85]	0.99 [-0.38, 2.15]	0.42 [-0.10, 0.80]	0.88 [0.59, 1.13]
fcspk	ARROW_2017_PIMD_SOLVENT2	2.40 [1.72, 2.93]	2.10 [1.40, 2.77]	1.97 [1.13, 2.75]	0.11 [0.00, 0.65]	-0.50 [-1.65, 0.60]	-0.16 [-0.66, 0.39]	1.06 [0.86, 1.27]
REF04	YANK-SMIRNOFF-TIP3P-FB-wet-oct	2.41 [1.23, 3.57]	1.81 [1.00, 2.86]	-1.81 [-2.86, -1.00]	0.17 [0.00, 0.69]	1.09 [-0.08, 2.22]	0.27 [-0.21, 0.63]	0.85 [0.53, 1.15]
6cm6a	ARROW_2017_PIMD	2.41 [1.74, 2.93]	2.10 [1.40, 2.78]	1.94 [1.08, 2.74]	0.19 [0.00, 0.68]	-0.66 [-1.75, 0.34]	-0.27 [-0.71, 0.29]	1.06 [0.84, 1.25]
bq6fo	Extended solvent-contact model approach	2.58 [1.69, 3.33]	2.15 [1.36, 3.01]	1.55 [0.32, 2.74]	0.10 [0.00, 0.57]	1.05 [-0.89, 2.76]	0.09 [-0.39, 0.60]	0.23 [-0.00, 0.42]
4nfzz	MD/S-HI-GAFF-TIP3P/MBAR/	2.67 [1.97, 3.34]	2.44 [1.82, 3.10]	-2.44 [-3.10, -1.82]	0.40 [0.04, 0.88]	1.30 [0.56, 1.88]	0.42 [-0.12, 0.87]	$0.20 \ [0.05, \ 0.39]$
623c0	MD-OPLSAA-wetoct	2.67 [2.13, 3.24]	2.53 [2.08, 3.07]	-2.53 [-3.07, -2.08]	0.22 [0.00, 0.80]	0.64 [-0.05, 1.11]	0.38 [-0.13, 0.84]	0.18 [0.09, 0.30]
eg52i	ARROW_2017	2.86 [2.00, 3.56]	2.41 [1.51, 3.33]	2.06 [0.89, 3.23]	0.15 [0.00, 0.55]	-0.94 [-2.19, 0.26]	-0.16 [-0.60, 0.35]	0.96 [0.69, 1.23]
5585v	Alchemical-CGenFF	2.88 [2.00, 3.68]	2.55 [1.80, 3.39]	2.40 [1.44, 3.34]	0.04 [0.00, 0.55]	-0.41 [-1.97, 0.60]	-0.20 [-0.75, 0.32]	0.46 [0.22, 0.74]
cp8kv	MD-OPLSAA-dryoct	2.88 [2.31, 3.61]	2.72 [2.27, 3.36]	-2.72 [-3.36, -2.27]	0.24 [0.00, 0.92]	0.78 [-0.02, 1.49]	0.59 [0.12, 1.00]	0.12 [0.06, 0.22]
j4nb3	FOURVAR	2.89 [2.33, 3.36]	2.63 [1.86, 3.28]	2.63 [1.86, 3.28]	0.01 [0.00, 0.75]	0.12 [-0.70, 0.91]	0.16 [-0.33, 0.77]	0.89 [0.72, 1.11]
hf4wj	MD/S-HI-GAFF-SPCE/MBAR/	3.28 [2.50, 4.10]	3.04 [2.36, 3.81]	-3.04 [-3.81, -2.36]	0.34 [0.03, 0.86]	1.31 [0.46, 1.95]	0.38 [-0.17, 0.84]	0.09 [0.01, 0.21]
pku5g	SAMPL5_49_retro3	4.87 [4.07, 5.72]	4.68 [3.92, 5.52]	4.68 [3.92, 5.52]	0.49 [0.03, 0.91]	1.80 [0.27, 3.02]	0.56 [-0.02, 1.00]	0.39 [0.25, 0.58]
po4g2	SAMPL5_49	5.46 [4.34, 6.61]	5.17 [4.17, 6.27]	5.17 [4.17, 6.27]	0.51 [0.03, 0.89]	2.33 [0.37, 3.78]	0.56 [0.00, 1.00]	0.34 [0.20, 0.51]

## Notes

- RMSE: Root mean square error
- MAE: Mean absolute error
- ME: Mean error
- R2: R-squared, square of Pearson correlation coefficient
- m: slope of the line fit to predicted vs experimental logP values
- $\tau$ : Kendall rank correlation coefficient
- ES: error slope calculated from the QQ Plots of model uncertainty predictions
- Mean and 95% confidence intervals of RMSE, MAE, ME, R2, and m were calculated by bootstrapping with 10000 samples.
- 95% confidence intervals of ES were calculated by bootstrapping with 1000 samples.