ID	name	RMSE	MAE	ME	\mathbb{R}^2	m	au	ES
hmz0n	cosmotherm_FINE19	0.38 [0.23, 0.56]	0.31 [0.19, 0.46]	-0.17 [-0.38, 0.05]	0.77 [0.36, 0.94]	0.94 [0.58, 1.18]	0.64 [0.18, 1.00]	1.15 [0.90, 1.33]
gmoq5	Global XGBoost-Based QSPR LogP Predictor	0.39 [0.28, 0.49]	0.34 [0.23, 0.47]	0.01 [-0.22, 0.26]	0.74 [0.39, 0.93]	0.99 [0.65, 1.34]	0.59 [0.08, 0.92]	0.69 [0.40, 1.03]
3vqbi	cosmoquick_TZVP18+ML	0.41 [0.28, 0.54]	0.36 [0.23, 0.49]	-0.08 [-0.31, 0.20]	0.66 [0.26, 0.94]	0.78 [0.48, 1.16]	0.56 [0.10, 0.91]	1.06 [0.85, 1.25]
j8nwc	EC_RISM_wet_P1w+2o	0.47 [0.17, 0.75]	0.31 [0.15, 0.55]	0.07 [-0.17, 0.38]	0.74 [0.37, 0.98]	1.14 [0.89, 1.37]	0.81 [0.46, 1.00]	1.31 [1.07, 1.46]
sq07q xxh4i	Local XGBoost-Based QSPR LogP Predictor SM12-Solvation-Trained	0.47 [0.32, 0.58] 0.49 [0.34, 0.63]	0.41 [0.27, 0.54] 0.43 [0.30, 0.58]	0.03 [-0.25, 0.31] 0.18 [-0.10, 0.44]	0.64 [0.24, 0.89] 0.54 [0.10, 0.87]	0.92 [0.51, 1.31] 0.60 [0.23, 0.99]	0.56 [0.10, 0.88] 0.51 [-0.02, 0.86]	0.60 [0.30, 0.94] 1.41 [1.35, 1.46]
dqxk4	LogP_SMD_Solvation_DFT	0.49 [0.35, 0.63]	0.42 [0.27, 0.58]	0.30 [0.07, 0.52]	0.69 [0.37, 0.92]	0.83 [0.49, 1.29]	0.67 [0.29, 0.96]	1.13 [0.94, 1.30]
hdpuj	RayLogP-II, a cheminformatic QSPR model predic	0.49 [0.36, 0.62]	0.44 [0.32, 0.58]	-0.29 [-0.51, -0.06]	0.74 [0.41, 0.94]	1.02 [0.70, 1.38]	0.67 [0.22, 1.00]	0.91 [0.70, 1.11]
vzgyt	rfs-logp	0.50 [0.25, 0.69]	0.38 [0.20, 0.59]	-0.35 [-0.58, -0.14]	0.72 [0.23, 0.94]	0.76 [0.48, 0.98]	0.64 [0.17, 0.92]	1.17 [0.92, 1.38]
ypmr0	SM8-Solvation	0.50 [0.36, 0.63]	0.44 [0.32, 0.58]	0.07 [-0.23, 0.35]	0.61 [0.26, 0.88]	0.93 [0.52, 1.42]	0.64 [0.23, 0.92]	1.48 [1.46, 1.49]
yd6ub	S + log P	0.51 [0.33, 0.66]	0.41 [0.24, 0.60]	0.09 [-0.23, 0.39]	0.63 [0.21, 0.89]	0.99 [0.45, 1.41]	0.53 [0.00, 0.88]	0.73 [0.36, 1.09]
7egyc	SMD-Solvation-Trained	0.52 [0.34, 0.67]	0.44 [0.28, 0.61]	0.27 [0.02, 0.53]	0.57 [0.21, 0.86]	0.50 [0.31, 0.77]	0.45 [0.04, 0.87]	1.45 [1.41, 1.48]
0a7a8 REF11	ML Prediction using MD Feature Vector Trained logP(o/w) (MOE)	0.53 [0.33, 0.69] 0.54 [0.26, 0.82]	0.43 [0.24, 0.62] 0.39 [0.20, 0.65]	0.32 [0.05, 0.56] 0.19 [-0.10, 0.50]	0.62 [0.15, 0.91] 0.59 [0.33, 0.88]	0.74 [0.38, 1.02] 0.90 [0.35, 1.62]	0.45 [-0.06, 0.84] 0.67 [0.33, 0.96]	1.01 [0.72, 1.27] 0.07 [-0.00, 0.35]
7dhtp	LogP-prediction-method-name	0.54 [0.26, 0.82]	0.44 [0.27, 0.63]	0.06 [-0.28, 0.36]	0.49 [0.08, 0.88]	0.73 [0.28, 1.16]	0.56 [0.06, 1.00]	0.50 [0.16, 0.85]
qyzjx	EC_RISM_dry_P1w+2o	0.54 [0.34, 0.75]	0.46 [0.31, 0.65]	-0.15 [-0.41, 0.19]	0.73 [0.31, 0.98]	1.22 [0.89, 1.47]	0.78 [0.44, 1.00]	1.22 [1.02, 1.35]
REF13	SlogP (MOE)	0.55 [0.37, 0.70]	0.47 [0.31, 0.64]	-0.27 [-0.54, 0.03]	0.69 [0.31, 0.93]	1.06 [0.54, 1.55]	0.60 [0.11, 0.96]	0.01 [-0.00, 0.15]
w6jta	ML Prediction using MD Feature Vector Trained	0.56 [0.32, 0.76]	0.46 [0.26, 0.66]	0.32 [0.05, 0.61]	0.53 [0.11, 0.89]	0.62 [0.35, 0.87]	0.51 [0.00, 0.91]	1.12 [0.85, 1.34]
5krdi	ZINC15 versus PM3	0.60 [0.39, 0.82]	0.51 [0.33, 0.72]	-0.30 [-0.61, 0.02]	0.63 [0.26, 0.92]	1.03 [0.59, 1.54]	0.60 [0.17, 0.92]	0.37 [0.08, 0.66]
REF10	h_logP (MOE)	0.60 [0.39, 0.83]	0.51 [0.34, 0.71]	-0.04 [-0.43, 0.33]	0.38 [0.01, 0.84]	0.65 [0.01, 1.25]	0.35 [-0.27, 0.82]	0.02 [-0.00, 0.15]
REF12	MoKa_logP SM8-Solvation-Trained	0.60 [0.41, 0.76] 0.60 [0.44, 0.75]	0.52 [0.35, 0.71] 0.53 [0.39, 0.71]	-0.08 [-0.45, 0.26] 0.45 [0.23, 0.67]	0.67 [0.22, 0.91] 0.66 [0.27, 0.90]	1.21 [0.78, 1.54] 0.66 [0.41, 0.97]	0.55 [0.06, 0.91] 0.51 [0.08, 0.87]	-0.00 [-0.00, 0.01] 1.43 [1.39, 1.47]
ji2zm gnxuu	ML Prediction using MD Feature Vector Trained	0.60 [0.44, 0.75]	0.51 [0.31, 0.72]	0.40 [0.14, 0.69]	0.53 [0.11, 0.91]	0.57 [0.32, 0.82]	0.51 [0.06, 0.88]	1.45 [1.39, 1.47] 1.10 [0.84, 1.31]
tc4xa	NHLBI-NN-5HL	0.62 [0.40, 0.81]	0.51 [0.31, 0.72]	0.17 [-0.17, 0.54]	0.66 [0.21, 0.91]	1.21 [0.59, 1.68]	0.49 [0.02, 0.87]	1.10 [0.84, 1.31]
6cdyo	SM12-Solvation	0.65 [0.41, 0.82]	0.54 [0.32, 0.75]	-0.24 [-0.58, 0.12]	0.52 [0.19, 0.83]	0.93 [0.46, 1.74]	0.53 [0.14, 0.88]	0.78 [0.48, 1.11]
dbmg3	GC-LSER	$0.70 \ [0.46, \ 0.90]$	0.60 [0.38, 0.83]	0.42 [0.09, 0.78]	0.47 [0.02, 0.83]	0.75 [0.08, 1.33]	0.38 [-0.21, 0.82]	1.43 [1.38, 1.47]
kxsp3	PLS2 from NIST data and QM-generated QSAR Desc	0.74 [0.48, 0.95]	0.62 [0.38, 0.87]	0.48 [0.13, 0.83]	0.36 [0.01, 0.80]	0.54 [0.03, 1.16]	0.35 [-0.22, 0.83]	0.71 [0.38, 1.03]
nh6c0	Molecular-Dynamics-Expanded-Ensembles	0.74 [0.54, 0.94]	0.67 [0.46, 0.88]	0.09 [-0.34, 0.57]	0.62 [0.14, 0.88]	1.34 [0.45, 1.93]	0.49 [0.02, 0.86]	0.74 [0.52, 0.99]
kivfu	LogP-prediction-method-IEFPCM/MST	0.78 [0.43, 1.09]	0.56 [0.29, 0.91]	-0.03 [-0.53, 0.40]	0.41 [0.04, 0.87]	0.97 [0.30, 1.41]	0.45 [0.00, 0.84]	1.07 [0.71, 1.39]
NULL0 REF09	mean clogP of FDA approved oral drugs (1998-2017) clogP (Biobyte)	0.79 [0.48, 1.05] 0.82 [0.52, 1.10]	0.66 [0.42, 0.94] 0.68 [0.41, 0.99]	0.42 [-0.02, 0.82] -0.26 [-0.68, 0.19]	0.00 [0.00, 0.00] 0.46 [0.09, 0.89]	0.00 [0.00, 0.00] 1.09 [0.45, 1.78]	nan [nan, nan] 0.48 [-0.06, 0.86]	-0.00 [-0.00, 0.13] 0.01 [-0.00, 0.18]
ujsgv	Alchemical-CGenFF	0.82 [0.52, 1.10]	0.67 [0.39, 0.97]	-0.31 [-0.76, 0.14]	0.33 [0.01, 0.82]	0.80 [-0.01, 1.44]	0.35 [-0.15, 0.80]	1.27 [1.12, 1.39]
wu52s	LogP-PLS-ECFC4_CSsep-Bayer	0.83 [0.59, 1.06]	0.72 [0.50, 0.98]	0.70 [0.45, 0.98]	0.55 [0.10, 0.98]	0.54 [0.25, 0.91]	0.56 [-0.08, 1.00]	0.42 [0.15, 0.73]
5mahv	ML Prediction using MD Feature Vector Trained	0.85 [0.41, 1.19]	0.62 [0.30, 0.97]	-0.02 [-0.53, 0.49]	0.34 [0.02, 0.81]	$0.90 \ [0.21, 1.42]$	$0.24 \left[-0.33, 0.76\right]$	1.07 [0.76, 1.35]
g6dwz	NHLBI-NN-3HL	0.85 [0.57, 1.10]	0.72 [0.47, 1.00]	0.35 [-0.13, 0.80]	0.52 [0.11, 0.85]	1.18 [0.55, 1.73]	0.45 [-0.02, 0.84]	0.84 [0.52, 1.15]
bqeuh	ISIDA-LSER	0.87 [0.53, 1.18]	0.66 [0.35, 1.03]	0.25 [-0.25, 0.78]	0.01 [0.00, 0.49]	-0.05 [-0.41, 0.54]	0.02 [-0.55, 0.60]	1.33 [1.19, 1.44]
d7vth	UFZ-LSER	0.87 [0.62, 1.11] 0.95 [0.62, 1.22]	0.78 [0.57, 1.04]	-0.65 [-0.99, -0.27]	0.63 [0.19, 0.94]	1.11 [0.69, 1.40]	0.49 [0.00, 0.84]	0.77 [0.55, 1.02]
2mi5w qz8d5	$ \begin{array}{c} {\rm Alchemical\text{-}CGenFF} \\ {\rm SMD\text{-}Solvation} \end{array} $	0.95 [0.62, 1.22]	0.81 [0.51, 1.10] 0.84 [0.56, 1.12]	-0.30 [-0.81, 0.23] 0.77 [0.41, 1.11]	0.18 [0.00, 0.66] 0.53 [0.14, 0.83]	0.61 [-0.12, 1.27] 0.93 [0.47, 1.56]	0.24 [-0.23, 0.73] 0.48 [0.02, 0.82]	1.21 [1.04, 1.36] 1.40 [1.34, 1.45]
kuddg	LogP-Pred-MTNN-GraphConv-Bayer	0.97 [0.71, 1.20]	0.89 [0.67, 1.14]	0.89 [0.67, 1.14]	0.67 [0.23, 0.95]	0.71 [0.42, 1.07]	0.53 [-0.04, 0.96]	0.17 [0.04, 0.34]
y0xxd	FS-GM (Fast switching Growth Method)	1.04 [0.36, 1.48]	0.72 [0.26, 1.20]	0.37 [-0.14, 0.99]	0.33 [0.00, 0.93]	1.03 [-0.14, 1.99]	0.42 [-0.08, 0.92]	1.31 [1.11, 1.47]
2ggir	FS-AGM (Fast switching Annihilation/Growth Met	1.04 [0.83, 1.25]	0.98 [0.75, 1.20]	-0.36 [-0.88, 0.32]	0.31 [0.00, 0.93]	0.98 [-0.33, 1.85]	0.49 [-0.04, 0.92]	0.83 [0.63, 1.02]
dyxbt	B3PW91-TZ SMD set1	1.07 [0.78, 1.37]	0.96 [0.70, 1.26]	0.96 [0.70, 1.26]	0.55 [0.12, 0.90]	0.68 [0.24, 1.18]	0.56 [0.11, 0.92]	-0.00 [-0.00, -0.00]
mm0jf	LogP-prediction-SMD-HuangLab	1.09 [0.90, 1.24]	1.03 [0.79, 1.22]	1.03 [0.79, 1.22]	0.75 [0.44, 0.98]	0.60 [0.39, 0.83]	0.75 [0.38, 1.00]	1.09 [0.99, 1.21]
h83sb	Linear Regression with B3LYP/6-31G+	1.12 [0.58, 1.57]	0.87 [0.48, 1.32]	-0.21 [-0.87, 0.38]	0.00 [0.00, 0.57]	-0.02 [-1.14, 0.79]	-0.16 [-0.67, 0.39]	0.33 [0.07, 0.59]
3wvyh f3dpg	Alchemical-CGenFF PLS from NIST data and QM-generated QSAR Descr	1.13 [0.48, 1.76] 1.17 [0.73, 1.54]	0.77 [0.34, 1.34] 0.92 [0.48, 1.38]	0.26 [-0.31, 0.97] -0.85 [-1.35, -0.36]	0.37 [0.02, 0.92] 0.11 [0.00, 0.46]	1.24 [0.29, 2.45] 0.36 [-0.11, 0.97]	0.55 [0.09, 0.94] 0.15 [-0.30, 0.53]	1.23 [0.96, 1.42] 0.63 [0.26, 1.02]
25s67	FS-AGM (Fast switching Annihilation/Growth Met	1.21 [0.83, 1.54]	1.06 [0.72, 1.41]	-0.85 [-1.35, -0.56]	0.63 [0.16, 0.90]	1.33 [0.40, 2.31]	0.45 [-0.11, 0.88]	0.65 [0.26, 1.02] 0.79 [0.52, 1.05]
zdj0j	Solvation-B3LYP	1.21 [0.98, 1.42]	1.13 [0.85, 1.39]	1.13 [0.85, 1.39]	0.64 [0.24, 0.95]	0.86 [0.40, 1.33]	0.64 [0.21, 0.96]	0.08 [-0.00, 0.30]
7gg6s	MLR from NIST data and QM-generated QSAR Descr	1.27 [0.81, 1.65]	1.00 [0.56, 1.49]	-1.00 [-1.48, -0.55]	0.10 [0.00, 0.44]	0.31 [-0.18, 0.85]	0.16 [-0.33, 0.54]	0.60 [0.21, 1.00]
hwf2k	Extended solvent-contact model approach	1.28 [0.60, 1.90]	0.93 [0.50, 1.50]	-0.09 [-0.90, 0.56]	0.12 [0.00, 0.81]	0.68 [-0.73, 1.69]	0.31 [-0.27, 0.76]	0.48 [0.24, 0.82]
pcv32	Solvation- WB97X-D	1.28 [1.01, 1.53]	1.17 [0.85, 1.47]	1.17 [0.85, 1.47]	0.50 [0.16, 0.88]	0.75 [0.28, 1.40]	0.44 [-0.04, 0.82]	0.28 [0.02, 0.47]
v2q0t	InterX_GAFF_WET_OCTANOL	1.31 [0.94, 1.66]	1.16 [0.82, 1.54]	-1.15 [-1.53, -0.79]	0.70 [0.24, 0.98]	1.31 [0.89, 1.63]	0.64 [0.15, 1.00]	1.34 [1.26, 1.42]
rdsnw	EC_RISM_wet_P1w+1o FS-GM (Fast switching Growth Method)	1.32 [0.89, 1.73] 1.32 [0.96, 1.65]	1.15 [0.82, 1.57] 1.16 [0.79, 1.54]	1.15 [0.82, 1.57] -1.15 [-1.53, -0.75]	0.78 [0.41, 0.97] 0.53 [0.13, 0.85]	1.51 [1.14, 1.77] 1.04 [0.48, 1.69]	0.75 [0.37, 1.00] 0.53 [0.10, 0.86]	0.98 [0.74, 1.21] 1.17 [1.01, 1.32]
ggm6n jjd0b	MD/S-MBIS-GAFF-TIP3P/MBAR/	1.35 [0.93, 1.77]	1.13 [0.71, 1.61]	-1.15 [-1.55, -0.75]	0.66 [0.21, 0.91]	1.51 [0.78, 2.04]	0.53 [0.10, 0.80]	0.75 [0.43, 1.06]
2tzb0	EC_RISM_dry_P1w+1o	1.38 [0.90, 1.82]	1.21 [0.81, 1.65]	1.21 [0.81, 1.65]	0.79 [0.37, 0.97]	1.58 [1.17, 1.86]	0.75 [0.36, 1.00]	1.00 [0.76, 1.22]
cr3hs	PLS3 from NIST data and QM-generated QSAR Desc	1.39 [0.58, 2.14]	0.96 [0.46, 1.67]	0.80 [0.20, 1.57]	0.40 [0.01, 0.81]	1.36 [-0.26, 2.84]	0.35 [-0.29, 0.84]	0.65 [0.33, 1.01]
arw58	DLPNO-CCSD(T)/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.41 [0.80, 1.92]	1.09 [0.62, 1.70]	1.01 [0.49, 1.65]	0.09 [0.00, 0.57]	-0.24 [-0.79, 0.32]	-0.20 [-0.65, 0.38]	-0.00 [-0.00, -0.00]
ahmtf	B3PW91-TZ SMD kcl-wet-oct	1.41 [1.13, 1.68]	1.33 [1.07, 1.62]	1.33 [1.07, 1.62]	0.55 [0.13, 0.89]	0.70 [0.25, 1.16]	0.56 [0.12, 0.92]	-0.00 [-0.00, -0.00]
o7djk	B3PW91-TZ SMD wetoct	1.42 [1.14, 1.69]	1.34 [1.08, 1.60]	1.34 [1.08, 1.60]	0.55 [0.11, 0.89]	0.70 [0.22, 1.21]	0.56 [0.09, 0.95]	-0.00 [-0.00, -0.00]
4p2ph	DLPNO-Solv-ccCA	1.44 [0.80, 1.96]	1.12 [0.60, 1.67]	1.04 [0.48, 1.63]	0.09 [0.00, 0.56]	-0.26 [-0.77, 0.27]	-0.26 [-0.72, 0.28]	-0.00 [-0.00, -0.00] 0.32 [0.05, 0.69]
fmf7r 6fyg5	$\begin{array}{c} \text{dice} \\ \text{Solvation-M062X} \end{array}$	1.44 [1.01, 1.79] 1.50 [1.25, 1.71]	1.25 [0.79, 1.69] 1.44 [1.17, 1.68]	0.26 [-0.56, 1.15] 1.44 [1.17, 1.68]	0.05 [0.00, 0.58] 0.69 [0.34, 0.95]	0.47 [-1.04, 1.92] 0.93 [0.52, 1.53]	0.10 [-0.54, 0.65] 0.71 [0.24, 1.00]	0.32 [0.05, 0.69] 0.05 [0.00, 0.18]
REF02	YANK-GAFF-TIP3P-wet-oct	1.62 [0.50, 2.62]	0.97 [0.43, 1.80]	-0.83 [-1.73, -0.19]	0.09 [0.04, 0.93]	1.10 [0.09, 1.91]	0.71 [0.24, 1.00] 0.53 [0.08, 0.91]	1.22 [0.91, 1.42]
1011.02	171111-01111-111 01 -MC0-000	1.02 [0.00, 2.02]	0.01 [0.40, 1.00]	5.05 [-1.15, -0.19]	0.22 [0.00, 0.09]	1.10 [0.03, 1.31]	0.00 [0.00, 0.91]	1.22 [0.31, 1.42]

ID	name	RMSE	MAE	ME	\mathbb{R}^2	m	τ	ES
sqosi	MD-AMBER-dryoct	1.69 [1.11, 2.17]	1.42 [0.85, 1.98]	-1.40 [-1.97, -0.81]	0.51 [0.04, 0.86]	1.40 [0.37, 2.01]	0.45 [0.00, 0.83]	0.72 [0.41, 1.08]
rs4ns	BLYP/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.71 [1.14, 2.25]	1.44 [0.92, 2.04]	1.44 [0.92, 2.04]	0.06 [0.00, 0.56]	-0.19 [-0.72, 0.31]	-0.22 [-0.71, 0.33]	0.07 [-0.00, 0.26]
REF07	YANK-GAFF-tip3p-dry-oct	1.73 [0.47, 2.85]	0.95 [0.32, 1.86]	-0.75 [-1.73, -0.00]	0.22 [0.01, 0.86]	1.23 [0.22, 2.32]	0.49 [0.03, 0.87]	1.23 [0.96, 1.43]
c7t5j	PBE/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.73 [1.13, 2.29]	1.47 [0.95, 2.08]	1.47 [0.95, 2.08]	0.05 [0.00, 0.50]	-0.18 [-0.70, 0.32]	-0.16 [-0.67, 0.42]	-0.00 [-0.00, 0.05]
REF08	YANK-SMIRNOFF-TIP3P-dry-oct	1.74 [0.53, 2.85]	1.05 [0.48, 1.96]	-0.83 [-1.83, -0.11]	0.08 [0.00, 0.73]	0.65 [-0.45, 1.57]	0.31 [-0.18, 0.76]	1.22 [0.94, 1.41]
jc68f	PW91/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.74 [1.10, 2.31]	1.47 [0.92, 2.08]	1.47 [0.92, 2.08]	0.05 [0.00, 0.50]	-0.18 [-0.74, 0.30]	-0.16 [-0.65, 0.36]	-0.00 [-0.00, 0.05]
03суу	Linear Regression-B3LYP/6-311G**	1.75 [0.57, 2.75]	1.11 [0.42, 1.98]	0.03 [-0.93, 1.24]	0.00 [0.00, 0.55]	0.12 [-1.06, 1.61]	0.09 [-0.57, 0.67]	0.36 [0.08, 0.73]
REF05	YANK-SMIRNOFF-TIP3P-wet-oct	1.77 [0.52, 2.87]	1.07 [0.40, 2.00]	-0.97 [-1.95, -0.24]	0.08 [0.00, 0.71]	0.63 [-0.41, 1.96]	0.35 [-0.14, 0.76]	1.18 [0.88, 1.40]
hsotx	B3LYP/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.81 [1.24, 2.31]	1.56 [1.06, 2.12]	1.56 [1.06, 2.12]	0.07 [0.00, 0.50]	-0.19 [-0.67, 0.26]	-0.20 [-0.65, 0.38]	-0.00 [-0.00, 0.01]
ke5gu	MD/S-MBIS-GAFF-SPCE/MBAR/	1.82 [1.30, 2.27]	1.59 [1.07, 2.11]	-1.59 [-2.11, -1.06]	0.62 [0.22, 0.90]	1.54 [0.79, 2.17]	0.53 [0.04, 0.91]	0.49 [0.20, 0.77]
fe8ws	B3PW91/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.83 [1.22, 2.36]	1.58 [1.07, 2.17]	1.58 [1.07, 2.17]	0.06 [0.00, 0.50]	-0.18 [-0.68, 0.30]	-0.16 [-0.65, 0.45]	-0.00 [-0.00, -0.00]
mwuua	MD-LigParGen-wetoct	1.83 [1.49, 2.15]	1.73 [1.39, 2.11]	-1.73 [-2.10, -1.39]	0.41 [0.01, 0.77]	0.67 [0.09, 1.11]	0.48 [0.00, 0.85]	0.49 [0.28, 0.72]
fyx45	LogP-prediction-Drude-FEP-HuangLab	1.85 [0.63, 2.73]	1.25 [0.53, 2.22]	0.65 [-0.36, 1.78]	0.63 [0.12, 0.91]	2.63 [0.88, 3.94]	0.67 [0.11, 1.00]	0.80 [0.45, 1.11]
5t0yn	PBE0/cc-pVTZ//B3LYP-D3/cc-pVTZ	1.85 [1.26, 2.37]	1.61 [1.08, 2.18]	1.61 [1.08, 2.18]	0.06 [0.00, 0.54]	-0.18 [-0.69, 0.29]	-0.16 [-0.67, 0.39]	-0.00 [-0.00, -0.00]
6nmtt	MD-AMBER-wetoct	1.87 [1.34, 2.46]	1.65 [1.16, 2.20]	-1.65 [-2.19, -1.15]	0.42 [0.02, 0.93]	1.10 [0.22, 1.63]	0.60 [0.08, 1.00]	0.57 [0.34, 0.84]
eufcy	MD-LigParGen-dryoct	1.99 [1.65, 2.35]	1.88 [1.52, 2.28]	-1.77 [-2.27, -1.21]	0.54 [0.15, 0.88]	1.43 [0.49, 2.41]	0.66 [0.21, 0.97]	0.41 [0.22, 0.65]
tzzb5	Alchemical-CGenFF	2.12 [1.58, 2.56]	1.87 [1.30, 2.42]	1.43 [0.48, 2.30]	0.20 [0.00, 0.64]	-0.76 [-1.72, 0.28]	-0.20 [-0.62, 0.33]	0.66 [0.36, 0.96]
3oqhx	MD-CHARMM-dryoct	2.14 [1.20, 2.91]	1.64 [0.83, 2.54]	1.11 [0.05, 2.25]	0.03 [0.00, 0.43]	-0.44 [-1.97, 1.20]	0.00 [-0.53, 0.56]	0.75 [0.35, 1.13]
bzeez	FS-AGM (Fast switching Annihilation/Growth Met	2.20 [1.85, 2.52]	2.07 [1.59, 2.47]	-2.07 [-2.47, -1.58]	0.63 [0.22, 0.96]	1.39 [0.86, 2.06]	0.53 [-0.02, 0.92]	0.23 [0.06, 0.52]
ynquk	TWOVAR	2.26 [1.88, 2.59]	2.13 [1.68, 2.55]	2.13 [1.68, 2.55]	0.08 [0.00, 0.77]	0.25 [-0.23, 0.63]	0.38 [-0.06, 0.80]	1.07 [0.94, 1.20]
5svjv	FS-GM (Fast switching Growth Method)	2.26 [1.88, 2.69]	2.14 [1.72, 2.60]	-2.03 [-2.56, -1.38]	0.39 [0.02, 0.91]	1.20 [0.39, 1.83]	0.44 [-0.18, 0.91]	0.74 [0.55, 0.96]
pnc4j	$\operatorname{LogP-prediction-Drude-Umbrella-HuangLab}$	2.29 [1.64, 2.89]	2.03 [1.36, 2.69]	2.03 [1.36, 2.69]	0.04 [0.00, 0.68]	0.31 [-0.81, 1.29]	0.20 [-0.37, 0.72]	0.39 [0.16, 0.72]
padym	InterX_ARROW_2017_PIMD_WET_OCTANOL	2.29 [1.65, 2.85]	1.99 [1.32, 2.68]	1.72 [0.75, 2.56]	0.12 [0.00, 0.67]	-0.60 [-1.86, 0.73]	-0.13 [-0.77, 0.52]	1.09 [0.90, 1.27]
odex0	InterX_ARROW_2017_PIMD_SOLVENT2_WET_OCTANOL	2.29 [1.66, 2.85]	1.98 [1.33, 2.68]	1.73 [0.83, 2.59]	0.09 [0.00, 0.68]	-0.53 [-1.97, 0.74]	-0.09 [-0.63, 0.50]	1.09 [0.90, 1.28]
REF06	YANK-SMIRNOFF-OPC-wet-oct	2.33 [1.21, 3.47]	1.85 [1.17, 2.84]	-1.85 [-2.82, -1.16]	0.13 [0.00, 0.90]	0.82 [-0.56, 1.99]	0.44 [-0.04, 0.84]	0.85 [0.58, 1.07]
REF03	YANK-GAFF-OPC-wet-oct	2.35 [1.20, 3.39]	1.85 [1.11, 2.79]	-1.85 [-2.77, -1.09]	0.13 [0.00, 0.80]	0.85 [-0.70, 2.25]	0.35 [-0.29, 0.88]	0.84 [0.53, 1.11]
REF01	YANK-GAFF-TIP3P-FB-wet-oct	2.40 [1.15, 3.59]	1.82 [1.09, 2.81]	-1.82 [-2.81, -1.09]	0.15 [0.00, 0.88]	0.99 [-0.59, 2.15]	0.42 [-0.13, 0.80]	0.88 [0.61, 1.14]
fcspk	ARROW_2017_PIMD_SOLVENT2	2.40 [1.76, 2.95]	2.10 [1.44, 2.80]	1.97 [1.18, 2.79]	0.11 [0.00, 0.64]	-0.50 [-1.58, 0.49]	-0.16 [-0.61, 0.40]	1.06 [0.85, 1.25]
REF04	YANK-SMIRNOFF-TIP3P-FB-wet-oct	2.41 [1.24, 3.55]	1.81 [1.00, 2.84]	-1.81 [-2.82, -0.99]	0.17 [0.00, 0.71]	1.09 [-0.14, 2.42]	0.27 [-0.18, 0.64]	0.85 [0.52, 1.12]
6cm6a	ARROW_2017_PIMD	2.41 [1.73, 2.97]	2.10 [1.37, 2.80]	1.94 [1.01, 2.77]	0.19 [0.00, 0.71]	-0.66 [-1.79, 0.43]	-0.27 [-0.72, 0.33]	1.06 [0.86, 1.28]
bq6fo	Extended solvent-contact model approach	2.58 [1.66, 3.41]	2.15 [1.32, 3.09]	1.55 [0.28, 2.86]	0.10 [0.00, 0.60]	1.05 [-0.81, 2.68]	0.09 [-0.39, 0.64]	0.23 [0.02, 0.40]
4nfzz	MD/S-HI-GAFF-TIP3P/MBAR/	2.67 [1.95, 3.34]	2.44 [1.81, 3.07]	-2.44 [-3.04, -1.81]	0.40 [0.04, 0.89]	1.30 [0.47, 1.84]	0.42 [-0.14, 0.88]	0.20 [0.05, 0.37]
623c0	MD-OPLSAA-wetoct	2.67 [2.15, 3.27]	2.53 [2.11, 3.10]	-2.53 [-3.09, -2.10]	0.22 [0.00, 0.83]	0.64 [-0.14, 1.10]	0.38 [-0.16, 0.87]	0.18 [0.09, 0.29]
eg52i	ARROW_2017	2.86 [1.99, 3.55]	2.41 [1.51, 3.28]	2.06 [0.81, 3.18]	0.15 [0.00, 0.58]	-0.94 [-2.26, 0.09]	-0.16 [-0.64, 0.29]	0.96 [0.70, 1.21]
5585v	Alchemical-CGenFF	2.88 [1.99, 3.66]	2.55 [1.78, 3.39]	2.40 [1.43, 3.33]	0.04 [0.00, 0.63]	-0.41 [-2.05, 0.62]	-0.20 [-0.76, 0.32]	0.46 [0.22, 0.72]
cp8kv	MD-OPLSAA-dryoct	2.88 [2.31, 3.61]	2.72 [2.27, 3.37]	-2.72 [-3.36, -2.27]	0.24 [0.00, 0.92]	0.78 [-0.09, 1.52]	0.59 [0.08, 1.00]	0.12 [0.06, 0.22]
j4nb3	FOURVAR	2.89 [2.35, 3.37]	2.63 [1.86, 3.27]	2.63 [1.86, 3.27]	0.01 [0.00, 0.78]	0.12 [-0.82, 0.93]	0.16 [-0.36, 0.79]	0.89 [0.72, 1.10]
hf4wj	MD/S-HI-GAFF-SPCE/MBAR/	3.28 [2.49, 4.15]	3.04 [2.34, 3.87]	-3.04 [-3.85, -2.33]	0.34 [0.02, 0.86]	1.31 [0.40, 2.02]	0.38 [-0.16, 0.88]	0.09 [0.01, 0.20]
pku5g	SAMPL5_49_retro3	4.87 [4.05, 5.78]	4.68 [3.90, 5.57]	4.68 [3.90, 5.57]	0.49 [0.04, 0.89]	1.80 [0.29, 3.01]	0.56 [0.02, 0.96]	0.39 [0.24, 0.57]
po4g2	$SAMPL5_{-}49$	5.46 [4.37, 6.64]	5.17 [4.19, 6.29]	5.17 [4.19, 6.29]	0.51 [0.05, 0.90]	2.33 [0.49, 3.91]	0.56 [-0.04, 1.00]	0.34 [0.19, 0.52]

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
- τ : 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.