path: example/sparse

filename: 0013

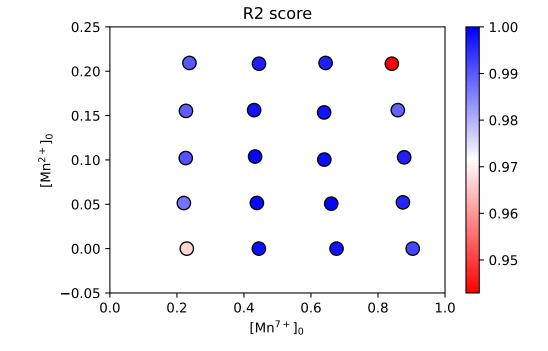
chem formula:

['Mn+7', 'Mn+3', 'Mn+2', 'C2O4-2', 'CO2', 'Mn+6', 'Mn+4', 'C2O4-1']

k_max = 1.00e+04 k_cut = 1.00e-02 lam = 1.28e-04 num_eq = 11 loss = 4.91e-03

 $\begin{array}{ll} \text{MRSE train} = 1.54\text{e-}03 \\ \text{MESE test} = 1.39\text{e-}02 \end{array}$

(1) Mn+7 + Mn+2



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(2) Mn+7 + C204-2
                     -> Mn+6 + C204-1
                                        k = 0.03
(3) Mn+3 + C204-2
                     -> Mn+2 + C204-1
                                        k = 10.85
                                        k = 9996.27
(4) Mn+2 + Mn+6
                     -> 2 Mn+4
(5) Mn+2 + Mn+4
                     -> 2 Mn+3
                                        k = 9999.74
(6) Mn+2 + C204-1
                     -> Mn+3 + C204-2
                                        k = 54.30
(7) C204-2 + Mn+4
                     -> Mn+3 + C204-1
                                        k = 35.66
(8) Mn+7 + C204-1
                     -> 2 CO2 + Mn+6
                                        k = 1049.52
(9) Mn+3 + C204-1
                     -> Mn+2 + 2 CO2
                                        k = 385.73
(10) C204-2 + Mn+6
                     -> 2 CO2 + Mn+4
                                        k = 478.75
(11) Mn+4 + C204-1
                     -> Mn+3 + 2 C02
                                        k = 9731.23
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-> Mn+3 + Mn+6

k = 48.67

