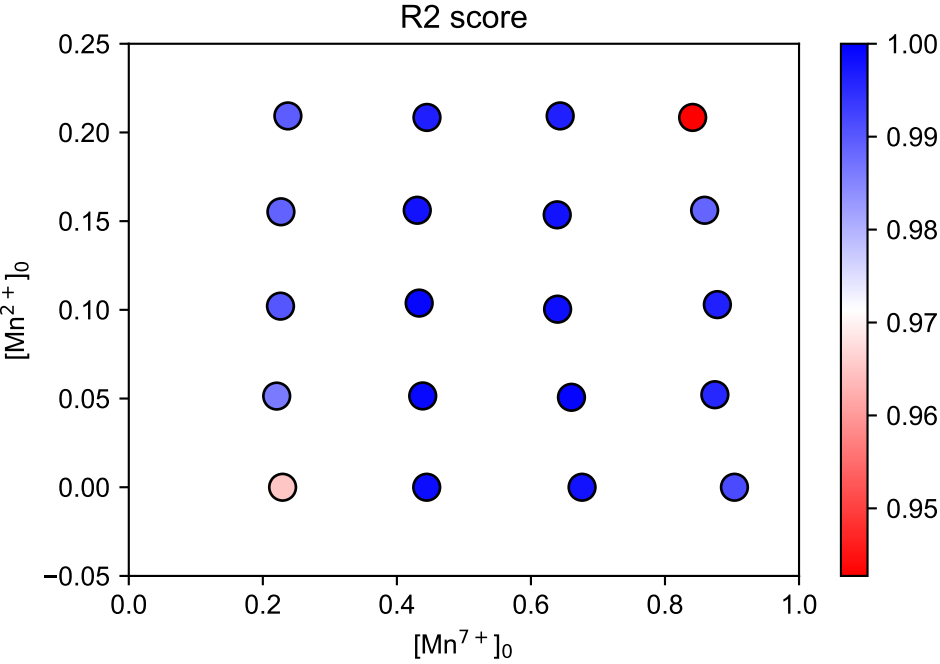


path: result/sparse\_02\_split  
filename: 0010

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

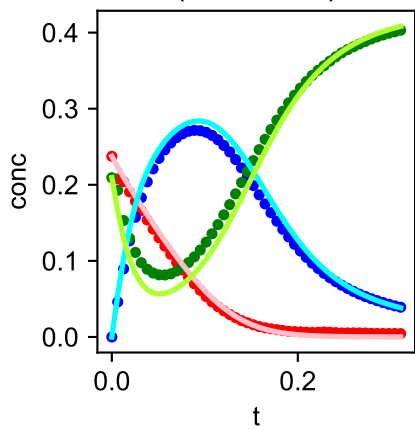
k\_max = 1.00e+04  
k\_cut = 1.00e-02  
lam = 6.40e-05  
num\_eq = 11  
loss = 3.22e-03

MRSE train = 1.54e-03  
MESE test = 1.43e-02

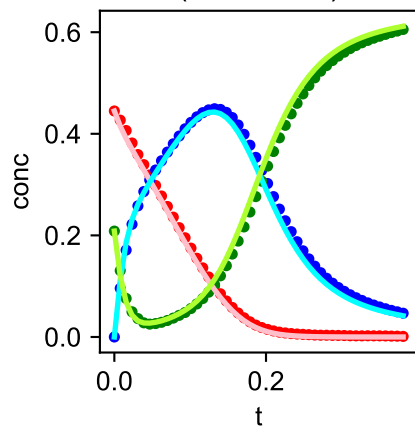


( 1)	Mn+7 + Mn+2	-> Mn+3 + Mn+6	k = 49.34
( 2)	Mn+7 + C2O4-2	-> Mn+6 + C2O4-1	k = 0.03
( 3)	Mn+3 + C2O4-2	-> Mn+2 + C2O4-1	k = 10.94
( 4)	Mn+2 + Mn+6	-> 2 Mn+4	k = 9991.41
( 5)	Mn+2 + Mn+4	-> 2 Mn+3	k = 9999.38
( 6)	Mn+2 + C2O4-1	-> Mn+3 + C2O4-2	k = 50.25
( 7)	C2O4-2 + Mn+4	-> Mn+3 + C2O4-1	k = 36.04
( 8)	Mn+7 + C2O4-1	-> 2 CO2 + Mn+6	k = 938.09
( 9)	Mn+3 + C2O4-1	-> Mn+2 + 2 CO2	k = 351.10
(10)	C2O4-2 + Mn+6	-> 2 CO2 + Mn+4	k = 444.72
(11)	Mn+4 + C2O4-1	-> Mn+3 + 2 CO2	k = 8869.00

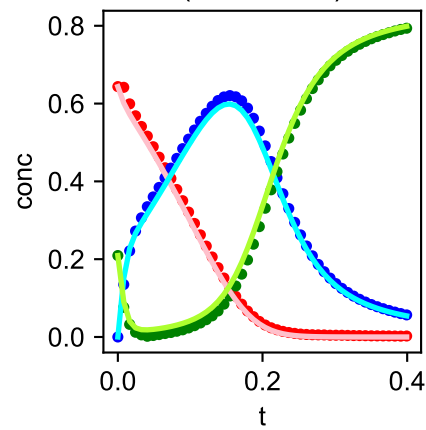
(0.24, 0.21)



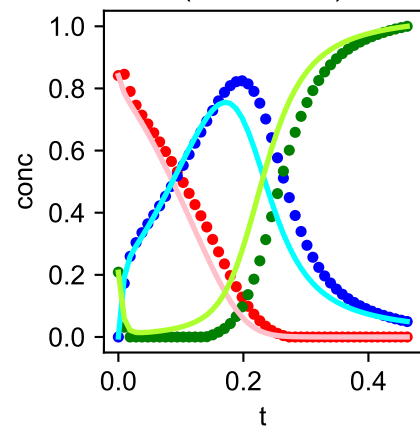
(0.44, 0.21)



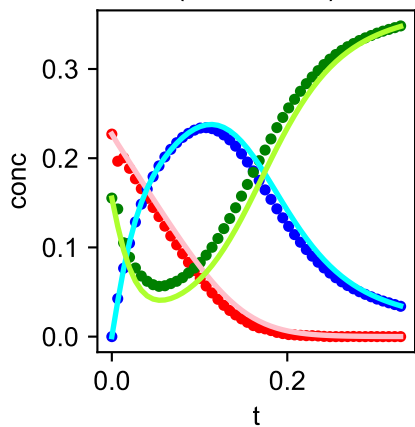
(0.64, 0.21)



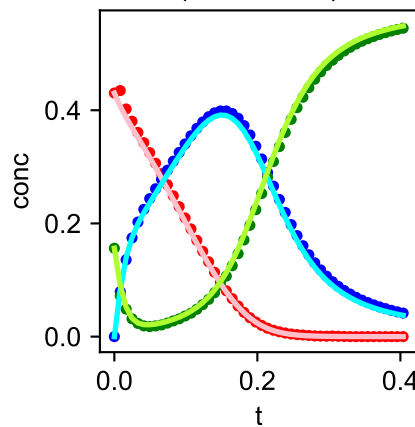
(0.84, 0.21)



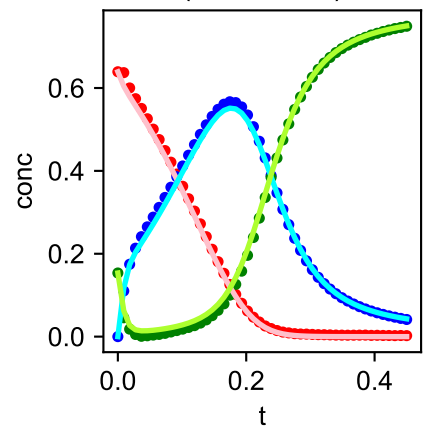
(0.23, 0.16)



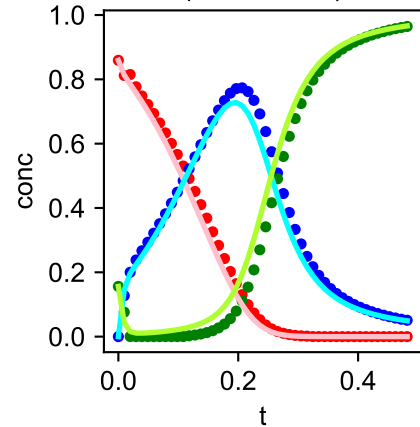
(0.43, 0.16)



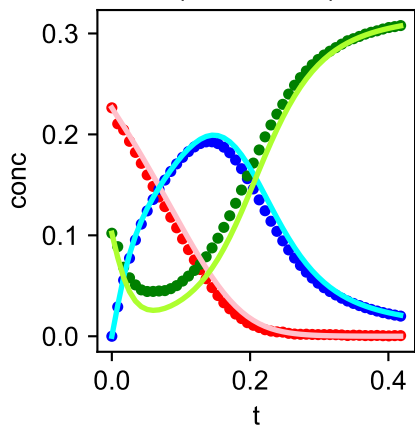
(0.64, 0.15)



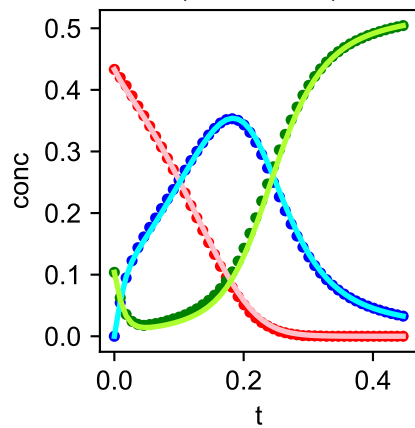
(0.86, 0.16)



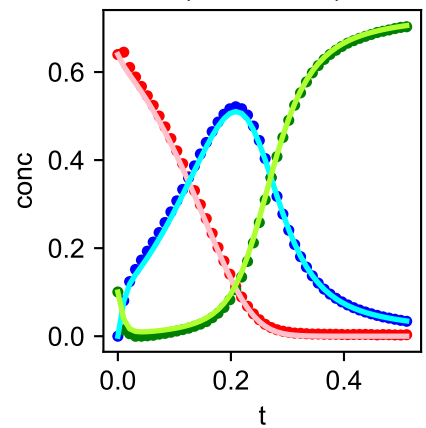
(0.23, 0.10)



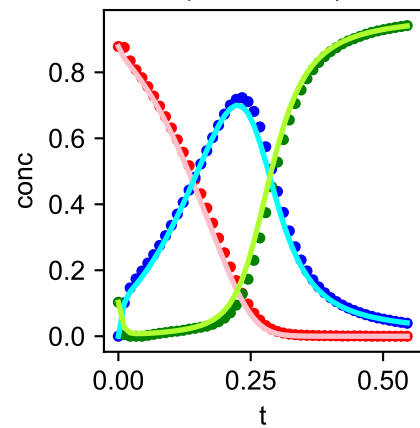
(0.43, 0.10)



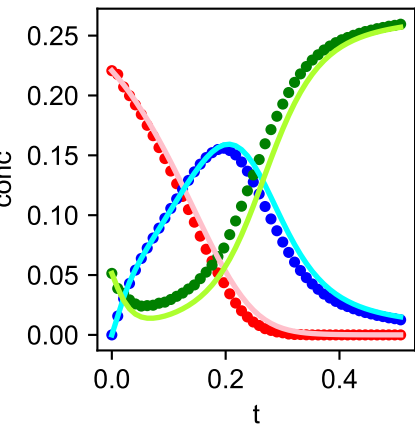
(0.64, 0.10)



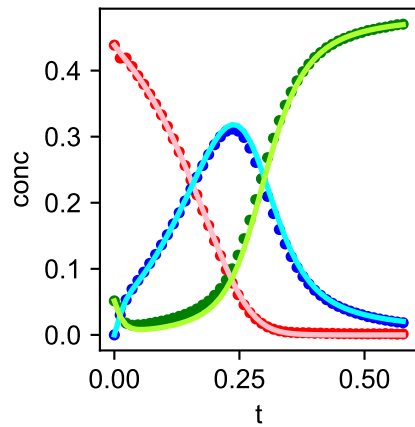
(0.88, 0.10)



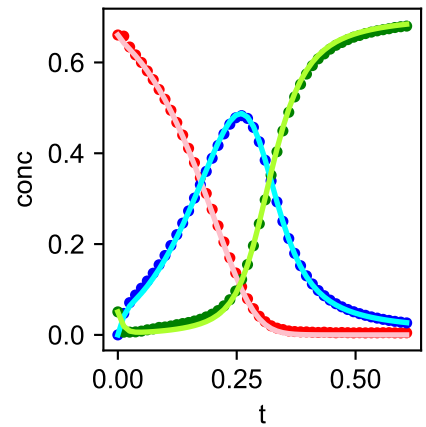
(0.22, 0.05)



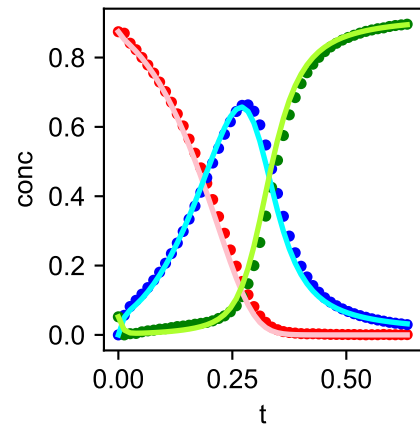
(0.44, 0.05)



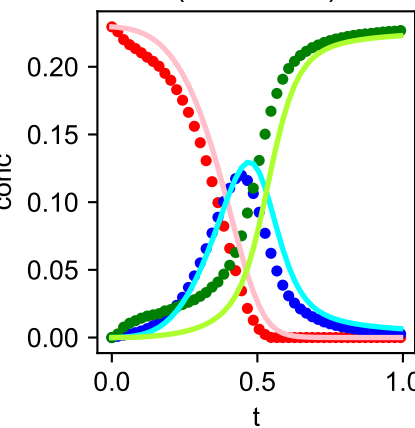
(0.66, 0.05)



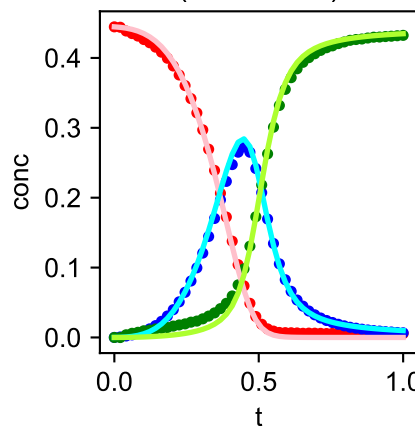
(0.87, 0.05)



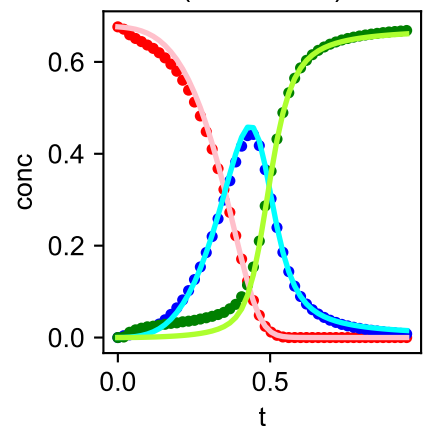
(0.23, 0.00)



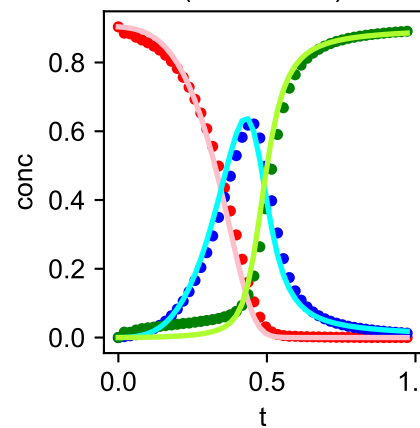
(0.44, 0.00)



(0.68, 0.00)



(0.90, 0.00)

([Mn<sup>7+</sup>]<sub>0</sub>, [Mn<sup>2+</sup>]<sub>0</sub>)— sim(Mn<sup>7+</sup>)— sim(Mn<sup>3+</sup>)— sim(Mn<sup>2+</sup>)• exp(Mn<sup>7+</sup>)• exp(Mn<sup>3+</sup>)• exp(Mn<sup>2+</sup>)