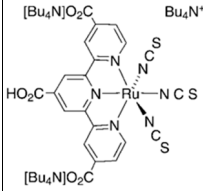
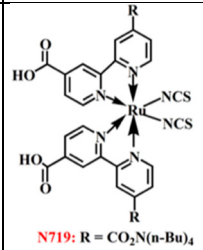
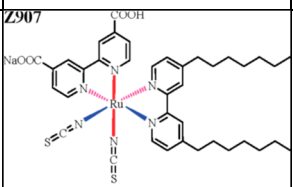
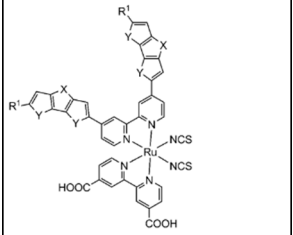
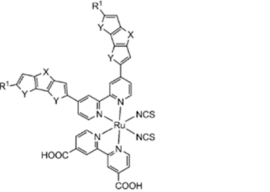
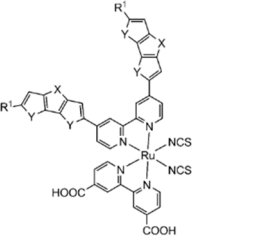
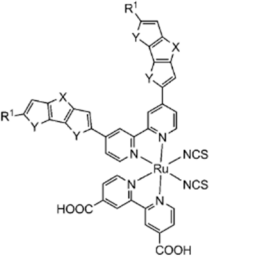
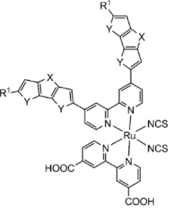
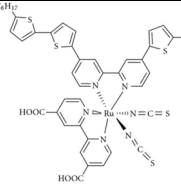
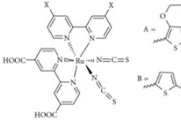
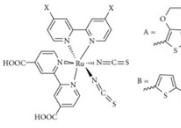

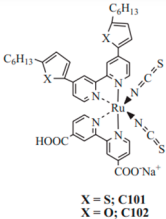
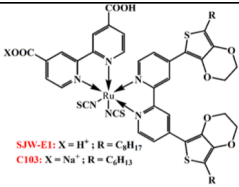
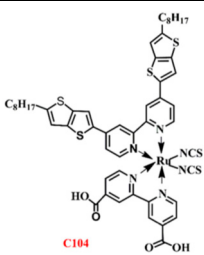
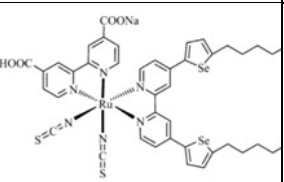
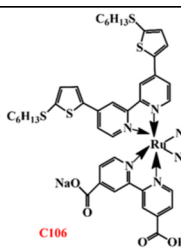


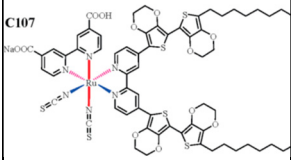
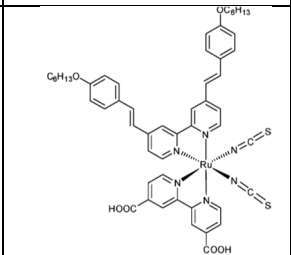
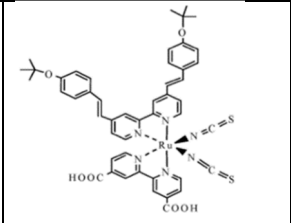

Table S1: Dataset

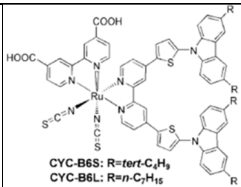
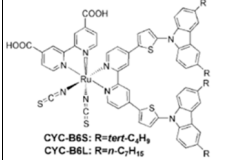
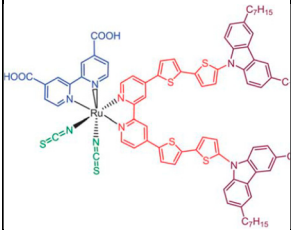
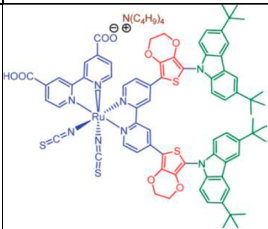
S.No.	Dye	Structure	Formula	λ_{max} (MLCT)	Solvent	C-C Single Bond	C=C double bond	C-N bond	Metal-N bond	C=O bond	Metal-NCS bond	C-O bond	Other bonds/ groups	References
1.	N749		$\text{C}_{69}\text{H}_{116}\text{N}_9\text{O}_6\text{RuS}_3$	600	DMF	11	6	6	3	3	3	3	$\text{N}^+\text{Bu}_4=2$	[1]
2.	N719	 <p>N719: $\text{R} = \text{CO}_2\text{N}(\text{n-Bu})_4$</p>	$\text{C}_{58}\text{H}_{86}\text{N}_8\text{O}_8\text{RuS}_2$	525	DMF	13	8	8	4	4	2	4	$\text{N}^+\text{Bu}_4=2$	[2-4]
3.	Z907		$\text{C}_{42}\text{H}_{52}\text{N}_6\text{O}_4\text{RuS}_2$	520	DMF	30	8	8	4	2	2	2	O-H=1 O-Na=1	[5, 6]
4.	YS-1	 <p> YS-1: $\text{X} = \text{C}(\text{C}_2\text{H}_5)_2$; $\text{Y} = \text{CH}=\text{CH}$; $\text{R}^1 = \text{H}$ YS-2: $\text{X} = \text{C}(\text{C}_6\text{H}_{13})_2$; $\text{Y} = \text{CH}=\text{CH}$; $\text{R}^1 = \text{H}$ YS-3: $\text{X} = \text{C}(\text{C}_6\text{H}_{13})_2$; $\text{Y} = \text{CH}=\text{CH}$; $\text{R}^1 = 2\text{-hexylthio}$ YS-4: $\text{X} = \text{N}(\text{C}_6\text{H}_{13})$; $\text{Y} = \text{CH}=\text{CH}$; $\text{R}^1 = \text{H}$ YS-5: $\text{X} = \text{N}(\text{C}_6\text{H}_{13})$; $\text{Y} = \text{S}$; $\text{R}^1 = \text{H}$ </p>	$\text{C}_{58}\text{H}_{48}\text{N}_6\text{O}_4\text{RuS}_2$	536	DMF	40	16	8	4	2	2	2	O-H=2	[6]

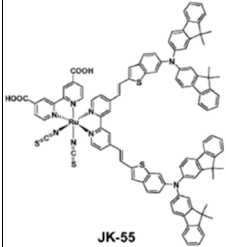
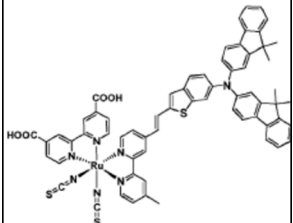
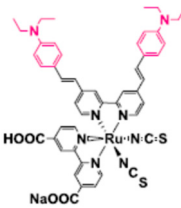
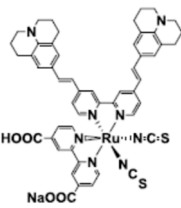
5.	YS-2	 <p> YS-1: X = C(C₂H₅)₂; Y = CH=CH; R¹ = H YS-2: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = H YS-3: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = 2-hexylthiophene YS-4: X = N(C₆H₁₃); Y = CH=CH; R¹ = H YS-5: X = N(C₆H₁₃); Y = S; R¹ = H </p>	C ₇₄ H ₈₀ N ₆ O ₄ RuS ₂	536	DMF	56	16	8	4	2	2	2	O-H=2	[6]
6.	YS-3	 <p> YS-1: X = C(C₂H₅)₂; Y = CH=CH; R¹ = H YS-2: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = H YS-3: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = 2-hexylthiophene YS-4: X = N(C₆H₁₃); Y = CH=CH; R¹ = H YS-5: X = N(C₆H₁₃); Y = S; R¹ = H </p>	C ₈₄ H ₉₄ N ₆ O ₄ RuS ₃	539	DMF	72	20	8	4	2	2	2	O-H=2 C-S=4	[6]
7.	YS-4	 <p> YS-1: X = C(C₂H₅)₂; Y = CH=CH; R¹ = H YS-2: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = H YS-3: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = 2-hexylthiophene YS-4: X = N(C₆H₁₃); Y = CH=CH; R¹ = H YS-5: X = N(C₆H₁₃); Y = S; R¹ = H </p>	C ₆₀ H ₅₄ N ₈ O ₄ RuS ₂	535	DMF	38	16	14	4	2	2	2	O-H=2	[6]


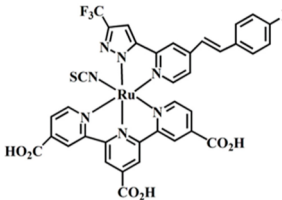
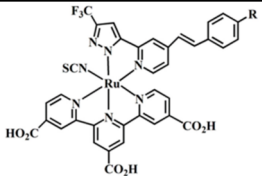
8.	YS-5	 <p>YS-1: X = C(C₆H₅)₂; Y = CH=CH; R¹ = H YS-2: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = H YS-3: X = C(C₆H₁₃)₂; Y = CH=CH; R¹ = 2-hexylthiophen YS-4: X = N(C₆H₁₃)₂; Y = CH=CH; R¹ = H YS-5: X = N(C₆H₁₃)₂; Y = S; R¹ = H</p>	C ₅₂ H ₄₆ N ₆ O ₄ RuS ₆	555	DMF	30	16	14	4	2	2	2	O-H=2	[6]
9.	CYC-B1		C ₅₆ H ₅₆ N ₆ O ₄ RuS ₆	553	DMF	36	16	8	4	2	2	2	O-H=2 C-S=8	[7]
10.	CYC-B3	 <p>SW-E1: X = A CYC-B3: X = B</p>	C ₄₈ H ₅₂ N ₆ O ₄ RuS ₄	544	DMF	32	12	8	4	2	2	2	O-H=2 C-S=4	[8]
11.	SJW-E1	 <p>SW-E1: X = A CYC-B3: X = B</p>	C ₅₂ H ₆₀ N ₆ O ₈ RuS ₄	546	DMF	34	12	8	4	2	2	10	O-H=2 C-S=4	[8]
12.	C101		C ₄₄ H ₄₄ N ₆ O ₄ RuS ₄	547	DMF	28	12	8	4	2	2	2	O-H=1 O-Na=1 C-S=4	[9]

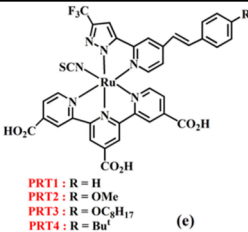
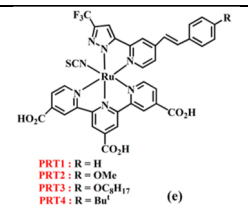
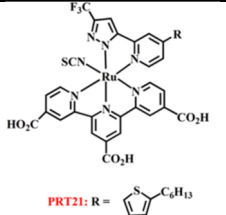

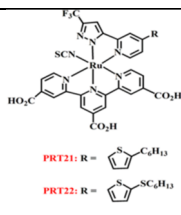


13.	C102	 <p>X = S; C101 X = O; C102</p>	$C_{44}H_{44}N_6O_6RuS_2$	547	DMF	28	12	8	4	2	2	6	O-H=1 O-Na=1	[10]
14.	C103	 <p>S1W-E1: X = H⁺; R = C₆H₁₇ C103: X = Na⁺; R = C₆H₁₃</p>	$C_{50}H_{52}N_7O_8RuS_4N$ a	550	DMF	30	12	8	4	2	2	10	O-H=1 O-Na=1 C-S=4	[11]
15.	C104	 <p>C104</p>	$C_{52}H_{50}N_6O_4RuS_6$	553	DMF	34	14	8	4	2	2	2	O-H=2 C-S=8	[12]
16.	C105	 <p>e₂</p>	$C_{44}H_{43}N_6O_4RuS_2S$	550	DMF	28	12	8	4	2	2	2	O-H=1 O-Na=1 C-Se=4	[13]
17.	C106	 <p>C106</p>	$C_{44}H_{44}N_6O_4RuS_6$	550	DMF	26	12	8	4	2	2	2	O-H=1 O-Na=1 C-S=8	[9]

18.	C107		$C_{64}H_{61}N_6O_{12}RuS_6Na$	559	DMF	40	16	8	4	2	2	18	O-H=1 O-Na=1 C-S=8	[11]
19.	K19		$C_{52}H_{52}N_6O_6RuS_2$ Benzene Ring-2	545	DMF	32	16	8	4	2	2	6	O-H=2	[14]
20.	K77		$C_{48}H_{44}N_6O_6RuS_2$ Benzene Ring-2	546	DMF	28	16	8	4	2	2	6	O-H=2	[15]
21.	CYC-B11		$C_{52}H_{48}N_6O_4RuS_8$	554	DMF	30	16	8	4	2	2	2	O-H=2 C-S=12	[16]

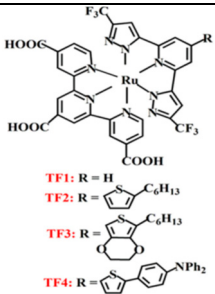


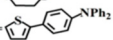
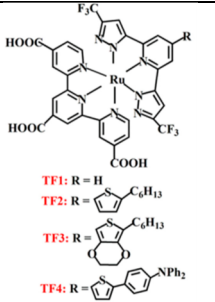


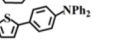
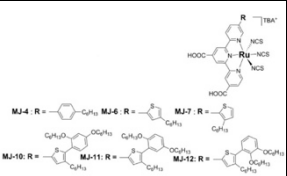




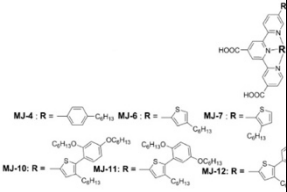




22.	CYC-B6L	 <p>CYC-B6S: R=tert-C₄H₉ CYC-B6L: R=n-C₇H₁₅</p>	C ₈₄ H ₉₀ N ₈ O ₄ RuS ₄	551	DMF	38	24	14	4	2	2	2	O-H=2 C-S=4	[17]
23.	CYC-B6S	 <p>CYC-B6S: R=tert-C₄H₉ CYC-B6L: R=n-C₇H₁₅</p>	C ₇₂ H ₆₆ N ₈ O ₄ RuS ₄	548	DMF	46	24	14	4	2	2	2	O-H=2 C-S=4	[17]
24.	CYC-B7	 <p>C₇H₁₅</p>	C ₉₂ H ₉₄ N ₈ O ₄ RuS ₆	551	DMF	62	28	14	4	2	2	2	O-H=2 C-S=8	[18]
25.	CYC-B13	 <p>N⁺(C₄H₉)₄</p>	C ₉₂ H ₁₀₅ N ₉ O ₈ RuS ₄	547	DMF	46	24	12	4	2	2	10	C-S=4 O-H=1 N ⁺ (C ₄ H ₉) ₄ =1	[19]

26.	JK-55	 <p>JK-55</p>	$C_{104}H_{78}N_8O_4RuS_4$	539	DMF	68	42	14	4	2	2	2	O-H=2 C-S=4	[20]
27.	JK-56	 <p>JK-56</p>	$C_{67}H_{49}N_7O_4RuS_3$	537	DMF	41	25	11	4	2	2	2	O-H=2 C-S=2	[20]
28.	RC-31	 <p>RC-31</p>	$C_{48}H_{45}N_8O_4RuS_2Na$	560	DMF	26	16	14	4	2	2	2	O-H=1 O-Na=1	[21]
29.	RC-32	 <p>RC-32</p>	$C_{52}H_{45}N_8O_4RuS_2Na$	564	DMF	34	16	14	4	2	2	2	O-H=1 O-Na=1	[21]

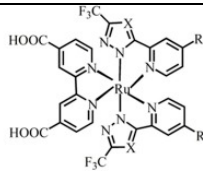
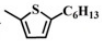
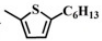
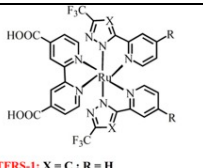
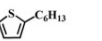
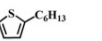
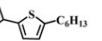
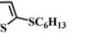
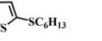
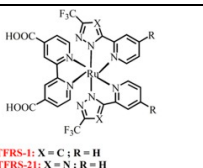


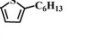


30.	RC-36		$C_{68}H_{45}N_8O_5RuS_2Na$ Benzene Ring-6	547	DMF	38	28	14	4	2	2	2	O-H=1 O-Na=1	[21]
31.	PRT1	 <p> PRT1 : R = H PRT2 : R = OMe PRT3 : R = OC₈H₁₇ PRT4 : R = Bu^t </p> <p>(e)</p>	$C_{36}H_{23}N_7O_6RuF_3S$ Benzene Ring-1	520	DMF	21	13	10	5	3	1	3	O-H=3 C-F=3	[22]
32.	PRT2	 <p> PRT1 : R = H PRT2 : R = OMe PRT3 : R = OC₈H₁₇ PRT4 : R = Bu^t </p> <p>(e)</p>	$C_{37}H_{25}N_7O_7RuF_6S$ Benzene Ring-1	517	DMF	21	13	10	5	3	1	5	O-H=3 C-F=3	[22]

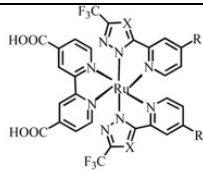


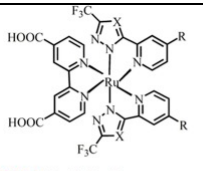


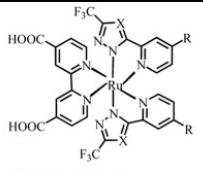


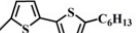
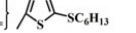
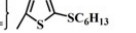
33.	PRT3	 <p>PRT1 : R = H PRT2 : R = OMe PRT3 : R = OC₈H₁₇ PRT4 : R = Bu^t</p> <p>(e)</p>	C ₄₄ H ₃₈ N ₇ O ₇ RuF ₃ S	519	DMF	28	13	10	5	3	1	5	O-H=3 C-F=3	[22]
34.	PRT4	 <p>PRT1 : R = H PRT2 : R = OMe PRT3 : R = OC₈H₁₇ PRT4 : R = Bu^t</p> <p>(e)</p>	C ₄₀ H ₃₀ N ₇ O ₆ RuF ₃ S	519	DMF	25	13	10	5	3	1	3	O-H=3 C-F=3	[22]
35.	PRT21	 <p>PRT21: R = </p>	C ₄₆ H ₃₈ N ₇ O ₆ RuF ₃ S ₂	514	DMF	24	11	10	5	3	1	3	O-H=3 C-F=3 N-N=1 C-S=2	[23]
36.	PRT22	 <p>PRT21: R =  PRT22: R = </p>	C ₄₆ H ₃₈ N ₇ O ₆ RuF ₃ S ₃	520	DMF	23	11	10	5	3	1	3	O-H=3 C-F=3 N-N=1 C-S=4	[23]

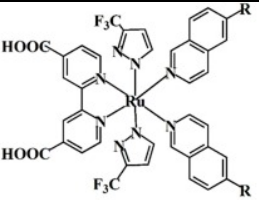
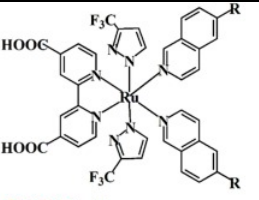
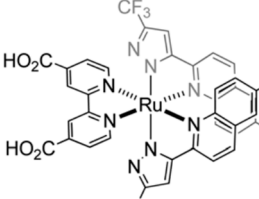
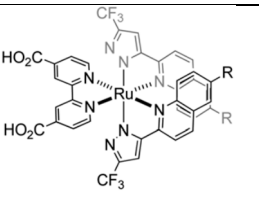
37.	PRT23	 PRT23: R =	$C_{41}H_{39}N_7O_4RuF_3S_2$	536	DMF	27	11	10	5	2	1	2	O-H=2 C-F=3 C-S=2	[23]
38.	PRT24	 PRT23: R = PRT24: R =	$C_{41}H_{39}N_7O_4RuF_3S_3$	537	DMF	26	11	10	5	2	1	2	O-H=2 C-F=3 C-S=4	[23]
39.	TF1	 TF1: R = H TF2: R =	$C_{31}H_{16}N_8O_6Ru$	510	DMF	19	10	12	6	3	0	3	O-H=3 C-F=6	[24]
40.	TF2	 TF1: R = H TF2: R =	$C_{41}H_{41}N_8O_6RuF_6S$	509	DMF	27	12	12	6	3	0	3	O-H=3 C-F=6 C-S=2	[24]

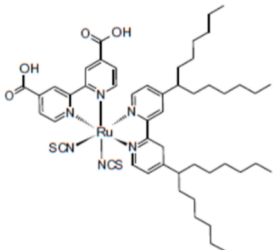
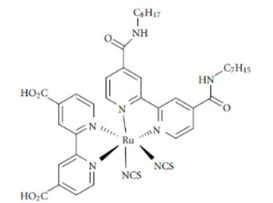
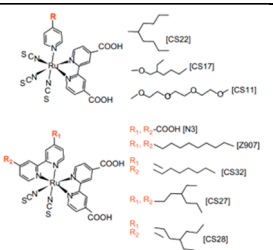
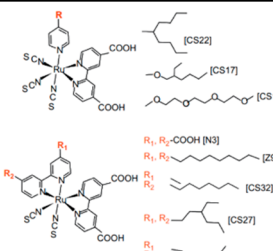
41.	TF3	 <p> TF1: R = H TF2: R =  TF3: R =  TF4: R =  </p>	$C_{43}H_{43}N_8O_8RuF_6S$	513	DMF	28	12	12	6	3	0	7	O-H=7 C-S=2 C-F=6	[24]
42.	TF4	 <p> TF1: R = H TF2: R =  TF3: R =  TF4: R =  </p>	$C_{53}H_{32}O_6N_9RuF_6S$	516	DMF	30	21	15	6	3	0	3	O-H=3 C-S=2 N-N=2	[24]
43.	MJ-4	 <p> MJ-4: R =  MJ-6: R =  MJ-7: R =  MJ-12: R =  </p>	$C_{49}H_{67}N_7O_4RuS_3$	594	DMF	20	9	6	3	2	3	2	O-H=2 TBA ⁺ =1	[25]
44.	MJ-6	 <p> MJ-4: R =  MJ-6: R =  MJ-7: R =  MJ-12: R =  </p>	$C_{47}H_{64}N_7O_4RuS_4$	608	DMF	16	8	6	3	2	3	2	O-H=2 TBA ⁺ =1 C-S=2	[25]

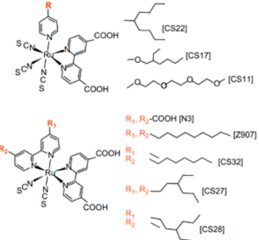
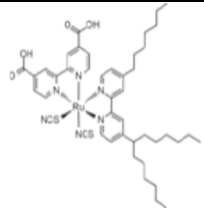
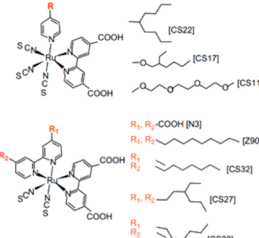
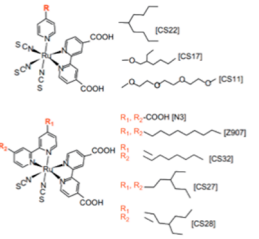
45.	MJ-7	<p>MJ-4: R = MJ-6: R = MJ-7: R = MJ-10: R = MJ-11: R = MJ-12: R = </p>	$C_{47}H_{64}N_7O_4RuS_4$	603	DMF	16	8	6	3	2	3	2	O-H=2 TBA ⁺ =1 C-S=2	[25]
46.	MJ-10	<p>MJ-4: R = MJ-6: R = MJ-7: R = MJ-10: R = MJ-11: R = MJ-12: R = </p>	$C_{65}H_{92}N_7O_6RuS_4$	630	DMF	32	11	6	3	2	3	6	O-H=2 TBA ⁺ =1 C-S=2	[25]
47.	MJ-11	<p>MJ-4: R = MJ-6: R = MJ-7: R = MJ-10: R = MJ-11: R = MJ-12: R = </p>	$C_{65}H_{92}N_7O_6RuS_4$	630	DMF	32	11	6	3	2	3	6	O-H=2 TBA ⁺ =1 C-S=2	[25]
48.	MJ-12	<p>MJ-4: R = MJ-6: R = MJ-7: R = MJ-10: R = MJ-11: R = MJ-12: R = </p>	$C_{65}H_{92}N_7O_6RuS_4$	631	DMF	32	11	6	3	2	3	6	O-H=2 TBA ⁺ =1 C-S=2	[25]
49.	TFRS-1	<p>TFRS-1: X = C ; R = H</p>	$C_{30}H_{18}O_4N_8RuF_6$	532	DMF	17	8	12	6	2	0	2	O-H=2 C-F=6 N-N=2	[26]

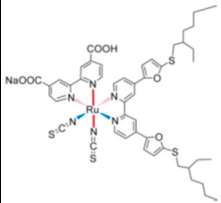
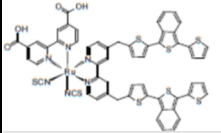
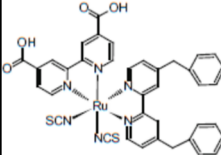
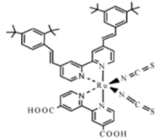
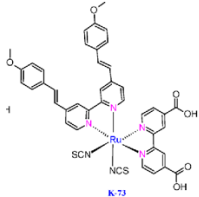
50.	TFRS-2	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  </p>	$C_{52}H_{52}O_4N_8RuF_6S$	533	DMF	33	14	12	6	2	0	2	O-H=2 C-F=6 C-S=4 N-N=2	[26]
51.	TFRS-3	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  TFRS-3: X = C ; R =  TFRS-4: X = C ; R =  TFRS-24: X = N ; R =  </p>	$C_{60}H_{56}N_8O_4RuF_6S_2$	503	DMF	37	18	12	6	2	0	2	O-H=2 C-F=6 C-S=8 N-N=2	[26]
52.	TFRS-4	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  TFRS-3: X = C ; R =  TFRS-4: X = C ; R =  TFRS-24: X = N ; R =  </p>	$C_{50}H_{52}N_8O_4RuF_6S_2$	501	DMF	31	14	12	6	2	0	2	O-H=2 C-F=6 C-S=8 N-N=2	[27]

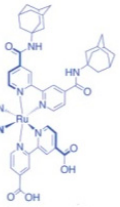
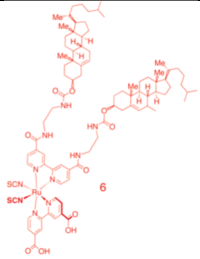
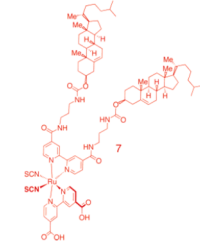
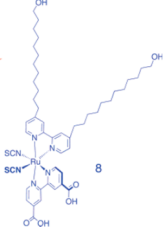
53.	TFRS-21	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  </p>	C ₂₈ H ₁₆ N ₁₀ O ₄ RuF ₆	499	DMF	15	8	16	6	2	0	2	O-H=2 C-F=6 N-N=2	[27]
54.	TFRS-22	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  </p>	C ₅₀ H ₅₀ N ₁₀ O ₄ RuF ₆ S	473	DMF	31	12	16	6	2	0	2	O-H=2 C-F=6 N-N=2 C-S=4	[27]
55.	TFRS-24	 <p> TFRS-1: X = C ; R = H TFRS-21: X = N ; R = H TFRS-2: X = C ; R =  TFRS-22: X = N ; R =  TFRS-3: X = C ; R =  TFRS-4: X = C ; R =  TFRS-24: X = N ; R =  </p>	C ₅₀ H ₅₀ N ₁₀ O ₄ RuF ₆	485	DMF	29	12	16	6	2	0	2	O-H=2 C-F=6 N-N=2 C-S=8	[27]

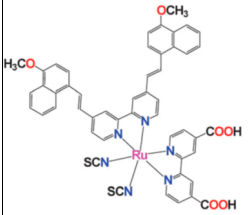

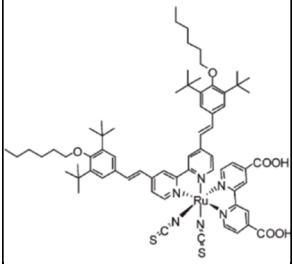

56.	TFRS-51	 <p>TFRS-51: R = H TFRS-52: R = ^tBu</p>	C ₃₈ H ₂₀ N ₈ O ₄ RuF ₆	499	DMF	21	14	12	6	2	0	2	C-F=6	[28]
57.	TFRS-52	 <p>TFRS-51: R = H TFRS-52: R = ^tBu</p>	C ₄₆ H ₃₆ N ₈ O ₄ RuF ₆	495	DMF	29	14	12	6	2	0	2	C-F=6	[28]
58.	TFRS-53	 <p>TFRS-53, R= H TFRS-54, R= t-butyl</p>	C ₃₈ H ₂₀ N ₈ O ₄ RuF ₆	500	DMF	23	14	12	6	2	0	2	C-F=6	[28]
59.	TFRS-54	 <p>TFRS-53, R= H TFRS-54, R= t-butyl</p>	C ₄₆ H ₃₆ N ₈ O ₄ RuF ₆	496	DMF	31	14	12	6	2	0	2	C-F=6	[28]


60.	CS9		$C_{50}H_{68}N_6O_4RuS_2$	518	DMF	38	8	8	4	2	2	2	O-H=2	[29]
61.	A597		$C_{41}H_{48}N_8O_4RuS_2$	539	DMF	27	8	12	4	4	2	2	O-H=2 N-H=2	[30]
62.	CS27		$C_{42}H_{54}O_4N_6RuS_2$	517	DMF	28	8	8	4	2	2	2	O-H=2	[31]
63.	CS28		$C_{42}H_{50}O_4N_6RuS_2$	518	DMF	21	8	8	4	2	2	2	O-H=2	[31]

64.	CS32	 <p>Chemical structure of a ruthenium complex with two terpyridine ligands and two thiolate ligands. The terpyridine ligands have various substituents including carboxylic acid groups and alkyl chains. The thiolate ligands are also substituted with various groups.</p>	$C_{40}H_{46}O_4N_6RuS_2$	518	DMF	20	8	8	4	2	2	2	O-H=2	[31]
65.	CS43	 <p>Chemical structure of a ruthenium complex with two terpyridine ligands and two thiolate ligands. The terpyridine ligands have various substituents including carboxylic acid groups and alkyl chains. The thiolate ligands are also substituted with various groups.</p>	$C_{44}H_{41}O_4N_6RuS_2$	518	DMF	32	8	8	4	2	2	2	O-H=2	[31]
66.	CS17	 <p>Chemical structure of a ruthenium complex with two terpyridine ligands and two thiolate ligands. The terpyridine ligands have various substituents including carboxylic acid groups and alkyl chains. The thiolate ligands are also substituted with various groups.</p>	$C_{28}H_{28}O_5N_6RuS_3$	530	DMF	16	6	6	3	2	2	4	O-H=2	[31]
67.	CS22	 <p>Chemical structure of a ruthenium complex with two terpyridine ligands and two thiolate ligands. The terpyridine ligands have various substituents including carboxylic acid groups and alkyl chains. The thiolate ligands are also substituted with various groups.</p>	$C_{30}H_{33}O_4N_6RuS_3$	533	DMF	18	6	6	3	2	2	2	O-H=2	[31, 32]

68.	LXJ-1		$C_{48}H_{46}O_6N_6RuS_2Na$	549	DMF	30	12	8	4	2	2	6	-O-H=1 O-Na=1 C-S=4	[33]
69.	KW-1 [#]		$C_{58}H_{36}O_4N_6RuS_8$	515	DMF	32	24	8	4	2	2	2	O-H=2 C-S=12	[34, 35]
70.	KW-2 [#]		$C_{54}H_{40}O_4N_6RuS_2$ Benzene Ring-4	550	DMF	32	22	8	4	2	2	2	O-H=2	[34, 35]
71.	HRD-1		$C_{56}H_{60}O_4N_6RuS_2$ Benzene Ring-2	543	Ethanol	38	16	8	4	2	2	2	O-H=2	[36]
72.	K-73		$C_{42}H_{31}O_6N_6RuS_2$ Benzene Ring-2	545	DMF	22	16	8	4	2	2	6	O-H=2	[14]

73.	KC-5 [#]		C ₄₆ H ₄₆ O ₆ N ₈ RuS ₂	537	DMF	36	8	12	4	4	2	2	O-H=2	[35, 37]
74.	KC-6 [#]		C ₈₆ H ₁₂₂ O ₁₀ N ₁₀ RuS ₂	531	DMF	75	10	16	4	6	2	6	N-H=4 O-H=2	[35, 37]
75.	KC-7 [#]		C ₈₈ H ₁₂₆ O ₁₀ N ₁₀ RuS ₂	533	DMF	76	10	16	4	6	2	6	N-H=4 O-H=2	[35, 37]
76.	KC-8 [#]		C ₄₈ H ₆₂ O ₆ N ₆ RuS ₂	522	DMF	36	8	8	4	2	2	4	O-H bond 4	[35, 37]

77.	MH06		$C_{50}H_{36}O_6N_6RuS_2$	541	DMF	28	20	8	4	2	2	4	0	[38]
78.	MH11		$C_{60}H_{36}O_4N_6RuS_2$	547	DMF	36	26	8	4	2	2	2	0	[38]
79.	MC119		$C_{68}H_{84}N_6O_6RuS_2$	548	DMF	45	16	8	4	2	2	6	0	[4]
80.	S3		$C_{81}H_{61}N_{11}O_4RuS_2$	516	DMF	46	32	20	4	2	2	2	O-H=1 TBA=1	[39]

81.	S4		$C_{106}H_{61}O_4N_{11}RuS_2$	518	DMF	49	38	20	4	2	2	2	O-H=1 TBA ⁺ =1	[39]
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