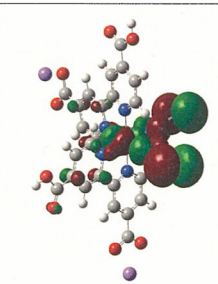
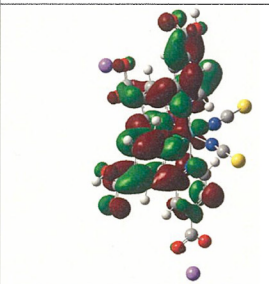
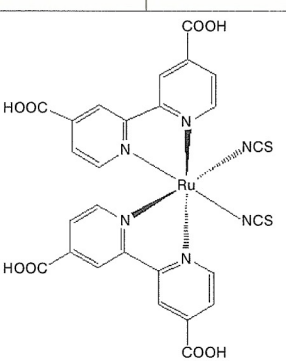
Name	N3	
IUPAC Name	*cis*-di(thiocyanato)-bis(2,2'-bipyridyl-4,4'-dicarboxylic acid)-ruthenium(Ⅱ)	
Type	Ru complex	
ε /$Mol^{-1}\cdot cm^{-1}$		λ_{max}/nm
48200 EtOH 14000 EtOH 14200 EtOH 13900 t-BuOH／AcN (1/1)		at 314 at 389 at 534 at 541
HOMO/V vs SCE		LUMO/V vs SCE
		
Structure	 $C_{26}H_{16}N_6O_8RuS_2$ Exact Mass : 705.95 Mol. Wt. : 705.64 C, 44.25 ; H, 2.29 ; N, 11.91 ; O, 18.14 ; Ru, 14.32 ; S, 9.09	

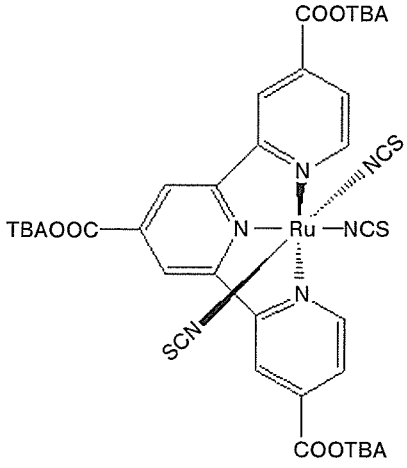
ref.	Brian O'Regan, Michael Grätzel A low-cost, high-efficiency solar cell based on dye-sensitized colloidal TiO_2 films Nature, 353, 737 (1991) M. K. Nazeeruddin, A. Kay, I. Rodicio, R. Humphry-Baker, E. Mueller, P. Liska, N. Vlachopoulos, M. Graetzel Conversion of light to electricity by cis-X2bis (2,2'-bipyridyl-4,4'-dicarboxylate) ruthenium (II) charge-transfer sensitizers (X=Cl-, Br-, I-, CN-, and SCN-) on nanocrystalline titanium dioxide electrodes J. Am. Chem. Soc., 115, 6382 (1993) Md. K. Nazeeruddin, S. M. Zakeeruddin, R. Humphry-Baker, M. Jirousek, P. Liska, N. Vlachopoulos, V. Shklover, Christian-H. Fischer, M. Grätzel Acid-Base Equilibria of (2,2'-Bipyridyl-4,4'-dicarboxylic acid)ruthenium(II) Complexes and the Effect of Protonation on Charge-Transfer Sensitization of Nanocrystalline Titania Inorg. Chem., 38, 6298 (1999)
lab.	Grätzel
remark	violet/solution, red/on TiO_2

Name	N749
IUPAC Name	(2,2' : 6',2"-terpyridine-4,4',4"-tricarboxylate)ruthenium(Ⅱ)tris(tetrabutylammonium)tris(isothiocyanate)
Type	Ru complex

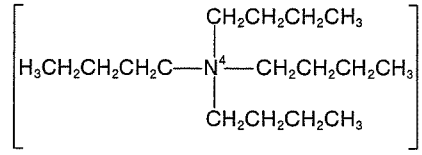
ε /$Mol^{-1}\cdot cm^{-1}$	λ_{max}/nm
6000 H_2O	at 570
7320 AcN	at 605
7480 EtOH	at 605
7900 DMF	at 609

HOMO/V vs SCE	LUMO/V vs SCE

Structure



TBA (tetrabuthylammonium) =



$C_{69}H_{116}N_9O_6RuS_3$
Exact Mass : 1364.73
Mol. Wt. : 1364.98
C, 60.71 ; H, 8.57 ; N, 9.24 ; O, 7.03 ; Ru, 7.40 ; S, 7.05

ref.

Mohammad K. Nazeeruddin, Peter Péchy, Thierry Renouard, Shaik M. Zakeeruddin, Robin Humphry-Baker, Pascal Comte, Paul Liska, Le Cevey, Emiliana Costa, Valery Shklover, Leone Spiccia, Glen B. Deacon, Carlo A. Bignozzi, Michael Grätzel
Engineering of Efficient Panchromatic Sensitizers for Nanocrystalline TiO_2-Based Solar Cells
J. Am. Chem. Soc., 123 (8), 1613 (2001)

Kohjiro Hara, Takeshi Nishikawa, Kazuhiro Sayama, Kenichi Aika, Hironori Arakawa
Novel and Efficient Organic Liquid Electrolytes for Dye-sensitized Solar Cells Based on a Ru (Ⅱ) Terpyridyl Complex Photosensitizer
Chem. Lett., 32, 1014 (2003)

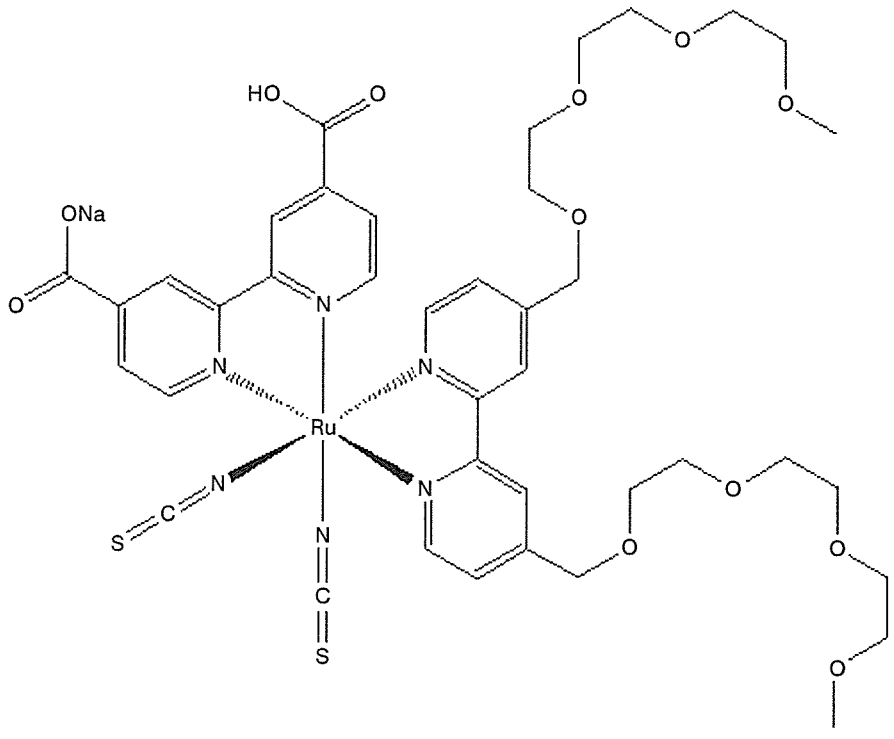
lab.	Grätzel
remark	Black/solution, black/on TiO_2

Name	K51
IUPAC Name	sodium[*cis*-di(thiocyanato)-(2,2'-bipyridyl-4-carboxylic acid-4'-carboxylate) (4,4'-bis[(triethylene glycol methyl ether)methyl ether]-2,2'-bipyridyl)-ruthenium(Ⅱ)]
Type	Ru complex

ε /$Mol^{-1}\cdot cm^{-1}$	λ_{max}/nm

HOMO/V vs SCE	LUMO/V vs SCE

Structure



$C_{40}H_{47}N_6NaO_{12}RuS_2$
Exact Mass : 992.16
Mol. Wt. : 992.03
C, 48.43 ; H, 4.78 ; N, 8.47 ; Na, 2.32 ; O, 19.35 ; Ru, 10.19 ; S, 6.46

ref.	Daibin Kuang, Cedric Klein, Henry J. Snaith, Jacques-E Moser, Robin Humphry-Baker, Pascal Comte, Shaik M. Zakeeruddin, Michael Grätzel Ion Coordinating Sensitizer for High Efficiency Mesoscopic Dye-Sensitized Solar Cells : Influence of Lithium Ions on the Photovoltaic Performance of Liquid and Solid-State Cells Nano Lett., 6 (4), 769 (2006)
lab.	Grätzel
remark	8.10% vs 6.73%(Z-907)