

Kenneth Kam-Wing Lo 羅錦榮

Date of Birth	12 June 1971	
Place of Birth	Hong Kong	
Academic Position	Professor	
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Areas of Specialism	Inorganic and organometallic photochemistry, biological probes	

Academic Qualifications

1990 – 1993	BSc (Hons), The University of Hong Kong
1993 – 1997	PhD, The University of Hong Kong
1997 – 1999	Croucher Foundation Postdoctoral Research Fellow, Inorganic Chemistry Laboratory, University of Oxford

Scholarships and Awards

1993 – 1996	Postgraduate Studentship, The University of Hong Kong
1994 – 1995	Hung Hing Ying Scholarship, The University of Hong Kong
1995 – 1996	Sir Edward Youde Memorial Fellowship, Sir Edward Youde Memorial Fund Council
1997 – 1999	Croucher Foundation Postdoctoral Fellowship, Croucher Foundation
2004	APA-Prize for Young Scientist, The Asian and Oceanian Photochemistry Association
2011	The Distinguished Lectureship Award, The Chemical Society of Japan

Employment History

1999 – 2003	Assistant Professor, Department of Biology and Chemistry, City University of Hong Kong
2003 – 2007	Associate Professor (Scale B), Department of Biology and Chemistry, City University of Hong Kong

2007 – 2011	Associate Professor (Scale A), Department of Biology and Chemistry, City University of Hong Kong
2011 – present	Professor, Department of Biology and Chemistry, City University of Hong Kong

Professional Qualifications

1. Member of the American Chemical Society
2. Member of the Royal Society of Chemistry
3. Member of the Hong Kong Chemical Society

Research Projects

Sole Principal Investigators of 11 General Research Funds/Competitive Earmarked Research Grants from the Hong Kong Research Grants Council and 15 Internal Grants from the City University of Hong Kong, with a total research income of HK\$8.3 M.

Student Training

14 PhD and 6 MPhil students

Full List of Publications

Refereed Journal Papers

1. Yam, V. W.-W.;* Choi, S. W.-K.; Lo, K. K.-W.; Dung, W.-F.; Kong, R. Y.-C. Photolytic Cleavage of DNA by $[\text{Au}_3(\text{dmmp})_2]^{3+*}$. *Journal of Chemical Society, Chemical Communications* **1994**, 2379 – 2380.
2. Yam, V. W.-W.;* Lo, K. K.-W. Synthesis, Photophysical and Electrochemical Properties of Luminescent Dinuclear Copper(I) Diimines. *Journal of Chemical Society, Dalton Transactions* **1995**, 499 – 500.
3. Yam, V. W.-W.;* Lo, K. K.-W.; Cheung, K.-K.; Kong, R. Y.-C. Synthesis, Photophysical Properties and DNA Binding Studies of Novel Luminescent Rhenium(I) Complexes. X-Ray Crystal Structure of $[\text{Re}(\text{dppn})(\text{CO})_3(\text{py})](\text{OTf})$. *Journal of Chemical Society, Chemical Communications* **1995**, 1191 – 1193.
4. Yam, V. W.-W.;* Lo, K. K.-W.; Cheung, K.-K. Synthesis and Crystal Structure of a Novel Copper(I) Crown Complex: A Spectrochemical Metal Ion Probe for Alkali Metal and Alkaline Earth Metal Cations. *Inorganic Chemistry* **1995**, 34, 4013 – 4014.
5. Yam, V. W.-W.;* Wong, K. M.-C.; Lee, V. W.-M.; Lo, K. K.-W.; Cheung, K.-K. Synthesis, Photophysics, Ion-Binding Studies, and Structural Characterization of Organometallic Rhenium(I) Crown Complexes. *Organometallics* **1995**, 14, 4034 – 4036.
6. Yam, V. W.-W.;* Lo, K. K.-W.; Cheung, K.-K. A Novel Luminescent μ_4 -Selenido-Bridged Copper(I) Tetramer. *Inorganic Chemistry* **1996**, 35, 3459 – 3462.
7. Yam, V. W.-W.;* Lo, K. K.-W.; Wang, C.-R.; Cheung, K.-K. The First Series of Luminescent (μ_4 -Chalcogenido)silver(I) Clusters. *Inorganic Chemistry* **1996**, 35,

8. Wang, C.-R.; Lo, K. K.-W.; Yam, V. W.-W.* Ab Initio Study of Luminescent Chalcogenido Silver(I) Clusters $[\text{Ag}_4(\mu\text{-H}_2\text{PCH}_2\text{PH}_2)_4(\mu_4\text{-E})]^{2+}$. *Chemical Physics Letters* **1996**, *262*, 91 – 96.
9. Wang, C.-R.; Lo, K. K.-W.; Yam, V. W.-W.* Molecular Orbital Studies of Luminescent Silver(I) Chalcogenido Clusters $[\text{Ag}_4(\mu\text{-dppm})_4(\mu_4\text{-E})]^{2+}$ (dppm = $\text{Ph}_2\text{PCH}_2\text{PPH}_2$). *Journal of Chemical Society, Dalton Transactions* **1997**, 227 – 229.
10. Yam, V. W.-W.* Lo, K. K.-W.; Wang, C.-R.; Cheung, K.-K. Synthesis, Photophysics and Transient Absorption Spectroscopic Studies of Luminescent Copper(I) Chalcogenide Complexes. Crystal Structure of $[\text{Cu}_4(\mu\text{-dtpm})_4(\mu_4\text{-S})](\text{PF}_6)_2$ {dtpm = Bis[bis(4-methylphenyl)phosphino]methane}. *Journal of Physical Chemistry A* **1997**, *101*, 4666 – 4672.
11. Yam, V. W.-W.* Lo, K. K.-W.; Cheung, K.-K.; Kong, R. Y.-C. Deoxyribonucleic Acid Binding and Photocleavage Studies of Rhenium(I) Dipyridophenazine Complexes. *Journal of Chemical Society, Dalton Transactions* **1997**, 2067 – 2072.
12. Yam, V. W.-W.* Lo, K. K.-W. Luminescent Tetranuclear Copper(I) and Silver(I) Chalcogenides. *Comments on Inorganic Chemistry* **1997**, *19*, 209 – 229.
13. Yam, V. W.-W.* Lo, K. K.-W.; Fung, W. K.-M.; Wang, C.-R. Design of Luminescent Polynuclear Copper(I) and Silver(I) Complexes with Chalcogenides and Acetylides as the Bridging Ligands. *Coordination Chemistry Reviews* **1998**, *171*, 17 – 41.
14. Wang, C.-R.; Lo, K. K.-W.; Fung, W. K.-M.; Yam, V. W.-W.* Ab Initio Molecular Orbital Studies on Luminescent Tetranuclear Copper(I) Complexes. *Chemical Physics Letters* **1998**, *296*, 505 – 514.
15. Yam, V. W.-W.* Pui, Y.-L.; Li, W.-P.; Lo, K. K.-W.; Cheung, K.-K. Synthesis, Photophysics, and Electrochemistry of Copper(I) Diimine Complexes Containing Thia-, Selena-, and Tellura-Crowns. A Spectrochemical Ion Probe for Soft Metal Ions. *Journal of Chemical Society, Dalton Transactions* **1998**, 3615 – 3621.
16. Yam, V. W.-W.* Lo, K. K.-W. Recent Advances in Utilization of Transition Metal Complexes and Lanthanides as Diagnostic Tools. *Coordination Chemistry Reviews* **1999**, *184*, 157 – 240.
17. Yam, V. W.-W.* Lo, K. K.-W.; Wong, K. M.-C. Luminescent Polynuclear Metal Acetylides. *Journal of Organometallic Chemistry* **1999**, *578*, 3 – 30.
18. Yam, V. W.-W.* Lo, K. K.-W. Luminescent Polynuclear d^{10} Metal Complexes. *Chemical Society Reviews* **1999**, 323 – 334.
19. Lo, K. K.-W.; Wong, L.-L.; Hill, H. A. O.* Surface-Modified Mutants of Cytochrome P450_{cam}: Enzymatic Properties and Electrochemistry. *FEBS Letters* **1999**, *451*, 342 – 346.
20. Davis, J. J.* Djuricic, D.; Lo, K. K.-W.; Wallace, E. N. K.; Wong, L.-L.; Hill, H. A. O. A Scanning Tunnelling Study of Immobilized Cytochrome P450_{cam}. *Faraday Discussions* **2000**, *116*, 15 – 22.
21. Lo, K. K.-W.* Ng, D. C.-M.; Hui, W.-K.; Cheung, K.-K. Luminescent Rhenium(I)

- Polypyridine Complexes Containing an Isothiocyanate Moiety – Versatile Labeling Reagents for DNA and Proteins. *Journal of Chemical Society, Dalton Transactions* **2001**, 2634 – 2640.
22. Lo, K. K.-W.;* Ng, D. C.-M.; Chung, C.-K. First Examples of Luminescent Cyclometalated Iridium(III) Complexes as Labeling Reagents for Biological Substrates. *Organometallics* **2001**, 20, 4999 – 5001.
 23. Lo, K. K.-W.;* Hui, W.-K.; Ng, D. C.-M.; Cheung, K.-K. Synthesis, Characterization, Photophysical Properties, and Biological Labeling Studies of a Series of Luminescent Rhenium(I) Polypyridine Maleimide Complexes. *Inorganic Chemistry* **2002**, 41, 40 – 46.
 24. Lo, K. K.-W.;* Chung, C.-K.; Ng, D. C.-M.; Zhu, N. Syntheses, Characterization and Photophysical Studies of Novel Biological Labeling Reagents Derived from Luminescent Iridium(III) Terpyridine Complexes. *New Journal of Chemistry* **2002**, 26, 81 – 88.
 25. Mukhopadhyay, R.;* Wong, L.-L.; Lo, K. K.-W.; Pochapsky, T.; Hill, H. A. O.* A Molecular Level Study of Complex Formation between Putidaredoxin and Cytochrome P450 by Scanning Tunnelling Microscopy. *Physical Chemistry Chemical Physics* **2002**, 4, 641 – 646.
 26. Djuricic, D.; Hill, H. A. O.;* Lo, K. K.-W.; Wong, L.-L. A Scanning Tunnelling Microscopy (STM) Investigation of Complex Formation between Cytochrome P450cam and Putidaredoxin. *Journal of Inorganic Biochemistry* **2002**, 88, 362 – 367.
 27. Lo, K. K.-W.;* Lau, J. S.-Y.; Ng, D. C.-M.; Zhu, N. Specific Labeling of Sulphydryl-containing Biomolecules with Redox-active *N*-(ferrocenyl)-iodoacetamide. *Journal of Chemical Society, Dalton Transactions* **2002**, 1753 – 1756.
 28. Lo, K. K.-W.;* Hui, W.-K.; Ng, D. C.-M. Novel Rhenium(I) Polypyridine Biotin Complexes That Show Luminescence Enhancement and Lifetime Elongation upon Binding to Avidin. *Journal of the American Chemical Society* **2002**, 124, 9344 – 9345.
 29. Lo, K. K.-W.;* Ng, D. C.-M.; Lau, J. S.-Y.; Wu, R. S.-S.; Lam, P. K.-S.* Derivatization of Microcystin with a Redox-active Label for High-performance Liquid Chromatography/Electrochemical Detection. *New Journal of Chemistry* **2003**, 27, 274 – 279.
 30. Lo, K. K.-W.;* Chung, C.-K.; Zhu, N. Synthesis, Photophysical and Electrochemical Properties, and Biological Labeling Studies of Cyclometalated Iridium(III) Bis(pyridylbenzaldehyde) Complexes: Novel Luminescent Cross-Linkers for Biomolecules. *Chemistry – A European Journal* **2003**, 9, 475 – 483.
 31. Lo, K. K.-W.;* Chung, C.-K.; Lee, T. K.-M.; Lui, L.-H.; Tsang, K. H.-K.; Zhu, N. New Luminescent Cyclometalated Iridium(III) Diimine Complexes as Biological Labeling Reagents. *Inorganic Chemistry* **2003**, 42, 6886 – 6897.
 32. Lo, K. K.-W.;* Tsang, K. H.-K.; Hui, W.-K.; Zhu, N. Luminescent Rhenium(I) Diimine Indole Conjugates – Photophysical, Electrochemical and Protein-binding Properties. *Chemical Communications* **2003**, 2704 – 2705.
 33. Lo, K. K.-W.;* Li, C.-K.; Lau, K.-W.; Zhu, N. Luminescent Cyclometalated

- Rhodium(III) Bis(pyridylbenzaldehyde) Complexes with Long-lived Excited States. *Dalton Transactions* **2003**, 4682 – 4689.
34. Mukhopadhyay, R.;* Lo, K. K.-W.; Wong, L.-L.; Hill, H. A. O.* Oriented Immobilization of Pseudomonas Putida Putidaredoxin at a Gold (111)-Buffer Interface: a Real Time Scanning Tunnelling Microscopy Study. *Journal of Microscopy* **2004**, 213, 6 – 10.
35. Lo, K. K.-W.;* Lau, J. S.-Y.; Fong, V. W.-Y.; Zhu, N. Electrochemical, Photophysical, and Anion-Binding Properties of a Luminescent Rhenium(I) Polypyridine Anthraquinone Complex with a Thiourea Receptor. *Organometallics* **2004**, 23, 1098 – 1106.
36. Lo, K. K.-W.;* Chan, J. S.-W.; Chung, C.-K.; Tsang, V. W.-H.; Zhu, N. Synthesis, Photophysical and Electrochemical Properties, and Biological Labeling Studies of Luminescent Cyclometalated Iridium(III) Bipyridine-aldehyde Complexes. *Inorganica Chimica Acta* **2004**, 357, 3109 – 3118 (Invited Article).
37. Lo, K. K.-W.;* Tsang, K. H.-K. Bifunctional Luminescent Rhenium(I) Complexes Containing an Extended Planar Diimine Ligand and a Biotin Moiety. *Organometallics* **2004**, 23, 3062 – 3070.
38. Lo, K. K.-W.;* Chan, J. S.-W.; Lui, L.-H.; Chung, C.-K. Novel Luminescent Cyclometalated Iridium(III) Diimine Complexes That Contain a Biotin Moiety. *Organometallics* **2004**, 23, 3108 – 3116.
39. Lo, K. K.-W.;* Lee, T. K.-M. Luminescent Ruthenium(II) Polypyridine Biotin Complexes: Synthesis, Characterization, Photophysical and Electrochemical Properties, and Avidin-Binding Studies. *Inorganic Chemistry* **2004**, 43, 5275 – 5282.
40. Lepeltier, M.; Lee, T. K.-M.; Lo, K. K.-W.;* Toupet, L.; Le Bozec, H.; Guerchais, V.* Synthesis, Structure, and Photophysical and Electrochemical Properties of Cyclometalated Iridium(III) Complexes with Phenylated Bipyridine Ligands. *European Journal of Inorganic Chemistry* **2005**, 110 – 117.
41. Jiang, Q.-T.; Lee, T. K.-M.; Cheng, K.; Wong, H.-L.; Zheng, J.-S.; Giesy, J. P.; Lo, K. K.-W.;* Yamashita, N.; Lam, P. K.-S.* Human Health Risk Assessment of Organochlorines Associated with Fish Consumption in a Coastal City in China. *Environmental Pollution* **2005**, 136, 155 – 165.
42. Lo, K. K.-W.;* Hui, W.-K. Design of Rhenium(I) Polypyridine Biotin Complexes as a New Class of Luminescent Probes for Avidin. *Inorganic Chemistry* **2005**, 44, 1992 – 2002.
43. Lo, K. K.-W.;* Hui, W.-K.; Chung, C.-K.; Tsang, K. H.-K.; Ng, D. C.-M.; Zhu, N.; Cheung, K.-K. Biological Labeling Reagents and Probes Derived from Luminescent Transition Metal Polypyridine Complexes. *Coordination Chemistry Reviews* **2005**, 249, 1434 – 1450 (Invited Article).
44. Lo, K. K.-W.;* Tsang, K. H.-K.; Hui, W.-K.; Zhu, N. Synthesis, Characterization, Crystal Structure, and Electrochemical, Photophysical, and Protein-Binding Properties of Luminescent Rhenium(I) Diimine Indole Complexes. *Inorganic Chemistry* **2005**, 44, 6100 – 6110.
45. Lo, K. K.-W.;* Li, C.-K.; Lau, J. S.-Y. Luminescent Cyclometalated Iridium(III)

- Arylbenzothiazole Biotin Complexes. *Organometallics* **2005**, *24*, 4594 – 4601.
46. Lepeltier, M.; Le Bozec, H.; Guerchais, V.* Lee, T. K.-M.; Lo, K. K.-W.* Tris-cyclometalated Iridium(III) Styryl Complexes and Their Saturated Analogues: Direct Functionalization of $\text{Ir}(4\text{-Me-ppy})_3$ and Hydrogen Transfer Process. *Organometallics* **2005**, *24*, 6069 – 6072.
47. Lo, K. K.-W.* Chung, C.-K.; Zhu, N. Nucleic Acid Intercalators and Avidin Probes Derived from Luminescent Cyclometalated Iridium(III)-Dipyridoquinoxaline and -Dipyridophenazine Complexes. *Chemistry – A European Journal* **2006**, *12*, 1500 – 1512.
48. Lo, K. K.-W.* Tsang, K. H.-K.; Sze, K.-S. Utilization of the Highly Environment-Sensitive Emission Properties of Rhenium(I) Amidodipyridoquinoxaline Biotin Complexes in the Development of Biological Probes. *Inorganic Chemistry* **2006**, *45*, 1714 – 1722.
49. Lo, K. K.-W.* Lee, T. K.-M.; Zhang, K. Y. Luminescent Probes for Indole-binding Proteins Derived from Ruthenium(II) Polypyridine Complexes. *Inorganica Chimica Acta* **2006**, *359*, 1845 – 1854 (Invited Article).
50. Lo, K. K.-W.* Hui, W.-K.; Chung, C.-K.; Tsang, K. H.-K.; Lee, T. K.-M.; Ng, D. C.-M. Luminescent Transition Metal Polypyridine Biotin Complexes. *Journal of the Chinese Chemical Society* **2006**, *53*, 53 – 65 (Invited Article).
51. Lo, K. K.-W.* Hui, W.-K.; Chung, C.-K.; Tsang, K. H.-K.; Lee, T. K.-M.; Li, C.-K.; Lau, J. S.-Y.; Ng, D. C.-M. Luminescent Transition Metal Complex Biotin Conjugates. *Coordination Chemistry Reviews* **2006**, *250*, 1724 – 1736 (Invited Article).
52. Lo, K. K.-W.* Tsang, K. H.-K.; Zhu, N. Luminescent Tricarbonylrhenium(I) Polypyridine Estradiol Conjugates: Synthesis, Crystal Structure, and Photophysical, Electrochemical, and Protein-Binding Properties. *Organometallics* **2006**, *25*, 3220 – 3227.
53. Lo, K. K.-W.* Lau, J. S.-Y.; Lo, D. K.-K.; Lo, L. T.-L. Luminescent Cyclometalated Iridium(III) Polypyridine Complexes Containing a Thiourea Moiety: Synthesis, Characterization, Photophysics, Electrochemistry and Anion-Binding Properties. *European Journal of Inorganic Chemistry* **2006**, 4054 – 4062 .
54. Lo, K. K.-W.* Lau, J. S.-Y.; Zhu, N. Synthesis, Crystal Structures, Electrochemical and Protein-Binding Properties of Ferrocene-Indole Conjugates. *New Journal of Chemistry* **2006**, *30*, 1567 – 1575.
55. Lo, K. K.-W.* Lee, T. K.-M. Luminescent Ruthenium(II) Amidodipyridoquinoxaline Biotin Complexes That Display Higher Avidin-induced Emission Enhancement. *Inorganica Chimica Acta* **2007**, *360*, 293 – 302 (Invited Article included in the special issue *Inorganic Chemistry – The Next Generation* to celebrate the 40th anniversary of the journal).
56. Lo, K. K.-W.* Lau, J. S.-Y. Cyclometalated Iridium(III) Diimine Bis(biotin) Complexes as the First Luminescent Biotin-based Cross-linkers for Avidin. *Inorganic Chemistry* **2007**, *46*, 700 – 709.
57. Lepeltier, M.; Lee, T. K.-M.; Lo, K. K.-W.* Toupet, L.; Le Bozec, H.; Guerchais, V.* Synthesis and Photophysical Properties of Bis-Cyclometalated Iridium(III)-Styryl

- Complexes and Their Saturated Analogues. *European Journal of Inorganic Chemistry* **2007**, 2734 – 2747.
58. Lo, K. K.-W.* Luminescent Transition Metal Complexes as Biological Labels and Probes. *Structure & Bonding* **2007**, 123, 205 – 245 (Invited Article).
59. Lo, K. K.-W.;* Sze, K.-S.; Tsang, K. H.-K.; Zhu, N. Luminescent Tricarbonylrhenium(I) Dipyridoquinoxaline Indole Complexes as Sensitive Probes for Indole-Binding Proteins. *Organometallics* **2007**, 26, 3440 – 3447.
60. Lo, K. K.-W.;* Zhang, K. Y.; Chung, C.-K.; Kwok, K. Y. Synthesis, Photophysical and Electrochemical Properties, and Protein-Binding Studies of Luminescent Cyclometalated Iridium(III) Bipyridine Estradiol Conjugates. *Chemistry – A European Journal* **2007**, 13, 7110 – 7120.
61. Lo, K. K.-W.;* Tsang, K. H.-K.; Sze, K.-S.; Chung, C.-K.; Lee, T. K.-M.; Zhang, K. Y.; Hui, W.-K.; Li, C.-K.; Lau, J. S.-Y.; Ng, D. C.-M.; Zhu, N. Non-Covalent Binding of Luminescent Transition Metal Polypyridine Complexes to Avidin, Indole-Binding Proteins and Estrogen Receptors. *Coordination Chemistry Reviews* **2007**, 251, 2292 – 2310 (Invited Article).
62. Lo, K. K.-W.;* Lee, T. K.-M.; Lau, J. S.-Y.; Poon, W.-L.; Cheng, S.-H. Luminescent Biological Probes Derived from Ruthenium(II) Estradiol Polypyridine Complexes. *Inorganic Chemistry* **2008**, 47, 200 – 208.
63. Lo, K. K.-W.;* Louie, M.-W.; Sze, K.-S.; Lau, J. S.-Y. Rhenium(I) Polypyridine Biotin Isothiocyanate Complexes as the First Luminescent Biotinylation Reagents – Synthesis, Photophysical Properties, Biological Labeling, Cytotoxicity, and Imaging Studies. *Inorganic Chemistry* **2008**, 47, 602 – 611.
64. Lo, K. K.-W.;* Zhang, K. Y.; Leung, S.-K.; Tang, M.-C. Exploitation of the Novel Dual-emissive Properties of Cyclometalated Iridium(III)-Polypyridine Complexes in the Development of Luminescent Biological Probes. *Angewandte Chemie International Edition* **2008**, 47, 2213 – 2216.
65. Lo, K. K.-W.;* Lee, P.-K.; Lau, J. S.-Y. Synthesis, Characterization, and Properties of Luminescent Organoiridium(III) Polypyridine Complexes Appended with an Alkyl Chain and their Interactions with Lipid Bilayers, Surfactants, and Living Cells. *Organometallics* **2008**, 27, 2998 – 3006.
66. Lau, J. S.-Y.; Lee, P.-K.; Tsang, K. H.-K.; Ng, C. H.-C.; Lam, Y.-W.; Cheng, S.-H.; Lo, K. K.-W.* Luminescent Cyclometalated Iridium(III) Polypyridine Indole Complexes – Synthesis, Photophysics, Electrochemistry, Protein-Binding Properties, Cytotoxicity, and Cellular Uptake. *Inorganic Chemistry* **2009**, 48, 708 – 718.
67. Zhang, K. Y.; Lo, K. K.-W.* Synthesis, Properties, and Live-Cell Imaging Studies of Luminescent Cyclometalated Iridium(III) Polypyridine Complexes Containing Two or Three Biotin Pendants. *Inorganic Chemistry* **2009**, 48, 6011 – 6025.
68. Louie, M.-W.; Liu, H.-W.; Lam, M. H.-C.; Lau, T.-C.; Lo, K. K.-W.* Novel Luminescent Tricarbonylrhenium(I) Polypyridine Tyramine-Derived Dipicolylamine Complexes as Sensors for Zinc(II) and Cadmium(II) Ions. *Organometallics* **2009**, 28, 4297 – 4307.

69. Louie, M.-W.; Lam, M. H.-C.; Lo, K. K.-W.* Luminescent Rhenium(I) Polypyridine Bis-Biotin Complexes as Crosslinkers for Avidin. *European Journal of Inorganic Chemistry* **2009**, 4265 – 4273.
70. Roy, V. A. L.;* Lo, K. K.-W.; Chow, C.-F.; Chui, S. S.-Y.; Lee, C.-S. Alignment of Charge-transfer Complexes for Molecular Devices. *Journal of Materials Chemistry* **2010**, 10, 434 – 438.
71. Zhang, K. Y.; Li, S. P.-Y.; Zhu, N.; Or, I. W.-S.; Cheung, M. S.-H.; Lam, Y.-W.;* Lo, K. K.-W.* Structure, Photophysical and Electrochemical Properties, Biomolecular Interactions, and Intracellular Uptake of Luminescent Cyclometalated Iridium(III) Dipyridoquinoxaline Complexes. *Inorganic Chemistry* **2010**, 49, 2530 – 2540.
72. Lo, K. K.-W.;* Louie, M.-W.; Zhang, K. Y. Design of Luminescent Iridium(III) and Rhenium(I) Polypyridine Complexes as In Vitro and In Vivo Ion, Molecular and Biological Probes. *Coordination Chemistry Reviews* **2010**, 254, 2603 – 2622 (Invited Article).
73. Leung, S.-K.; Kwok, K. Y.; Zhang, K. Y.; Lo, K. K.-W.* Design of Luminescent Biotinylation Reagents Derived from Cyclometalated Iridium(III) and Rhodium(III) Bis(pyridylbenzaldehyde) Complexes. *Inorganic Chemistry* **2010**, 49, 4984 – 4995.
74. Zhang, K. Y.; Liu, H.-W.; Fong, T. T.-H.; Chen, X.-G.; Lo, K. K.-W.* Luminescent Dendritic Cyclometalated Iridium(III) Polypyridine Complexes: Synthesis, Emission Behavior, and Biological Properties. *Inorganic Chemistry* **2010**, 49, 5432 – 5443.
75. Li, S. P.-Y.; Liu, H.-W.; Zhang, K. Y.; Lo, K. K.-W.* Modification of Luminescent Iridium(III) Polypyridine Complexes with Discrete Poly(ethylene glycol) (PEG) Pendants: Synthesis, Emissive Behaviour, Intracellular Uptake, and PEGylation Properties. *Chemistry – A European Journal* **2010**, 16, 8329 – 8339.
76. Liu, H.-W.; Zhang, K. Y.; Law, W. H.-T.; Lo, K. K.-W.* Cyclometalated Iridium(III) Bipyridine Complexes Functionalized with an *N*-Methylamino-oxy Group as Novel Phosphorescent Labeling Reagents for Reducing Sugars. *Organometallics* **2010**, 29, 3474 – 3476.
77. Lo, K. K.-W.;* Leung, A. H.-H. Luminescent Cyclometalated Iridium(III) Dipyridoquinoxaline Indole Complexes as Biological Probes. *Science in China Series B – Chemistry* **2010**, 53, 2091 – 2098 (Invited Article included in the proceedings of the 6th National Conference on Coordination Chemistry).
78. Lo, K. K.-W.;* Li, S. P.-Y.; Zhang, K. Y. Development of Luminescent Iridium(III) Polypyridine Complexes as Chemical and Biological Probes. *New Journal of Chemistry* **2011**, 35, 265 – 287. (Invited Article published as a Perspective).
79. Lee, P.-K.; Liu, H.-W.; Yiu, S.-M.; Louie, M.-W.; Lo, K. K.-W.* Luminescent Cyclometalated Iridium(III) Bis(quinolylbenzaldehyde) Diimine Complexes – Synthesis, Photophysics, Electrochemistry, Protein Cross-linking Properties, Cytotoxicity and Cellular Uptake. *Dalton Transactions* **2011**, 2180 – 2189. (Invited Article included in the special issue *New Talent: Asia*).
80. Lo, K. K.-W.;* Zhang, K. Y.; Li, S. P.-Y. Design of Cyclometalated Iridium(III) Polypyridine Complexes as Luminescent Biological Labels and Probes, *Pure and Applied Chemistry* **2011**, 83, 823 – 840. (Invited Article included in the proceedings of the XXIII IUPAC Symposium on Photochemistry).

81. Qiao, Y.; Gao, J.; Qiu, Y.; Wu, L.; Guo, F.; Lo, K. K.-W.; Li, D.* Design, Synthesis, and Characterization of Piperazinedione-based Dual Protein Inhibitors for Both Farnesyltransferase and Geranylgeranyltransferase-I, *European Journal of Medicinal Chemistry* **2011**, *46*, 2264 – 2273.
82. Leung, S.-K.; Liu, H.-W.; Lo, K. K.-W.* Functionalization of Luminescent Cyclometalated Iridium(III) Polypyridine Complexes with a Fluorous Moiety: Photophysics, Protein-Binding, Bioconjugation, and Uptake Properties, *Chemical Communications* **2011**, *47*, 10548 – 10550.
83. Louie, M.-W.; Liu, H.-W.; Lam, M. H.-C.; Lam, Y.-W.; Lo, K. K.-W.* Luminescent Rhenium(I) Polypyridine Complexes Appended with an α -D-Glucose Moiety as Novel Biomolecular and Cellular Probes, *Chemistry – A European Journal* **2011**, *17*, 8304 – 8308.
84. Lo, K. K.-W.;* Zhang, K. Y.; Li, S. P.-Y. Recent Exploitation of Luminescent Rhenium(I) Tricarbonyl Polypyridine Complexes as Biomolecular and Cellular Probes, *European Journal of Inorganic Chemistry* **2011**, 3551 – 3568 (Invited Article published as a Microreview).
85. Lee, P.-K.; Law, W. H.-T.; Liu, H.-W.; Lo, K. K.-W.* Luminescent Cyclometalated Iridium(III) Polypyridine Di-2-picolyamine Complexes: Synthesis, Photophysics, Electrochemistry, Cation Binding, Cellular Internalization, and Cytotoxic Activity, *Inorganic Chemistry* **2011**, *50*, 8570 – 8579.
86. Louie, M.-W.; Fong, T. T.-H.; Lo, K. K.-W.* Luminescent Rhenium(I) Polypyridine Fluorous Complexes as Novel Trifunctional Biological Probes, *Inorganic Chemistry* **2011**, *50*, 9465 – 9471.
87. Lo, K. K.-W.;* Choi, A. W.-T.; Law, W. H.-T. Applications of Luminescent Inorganic and Organometallic Transition Metal Complexes as Biomolecular and Cellular Probes, *Dalton Transactions*, **2012**, *41*, 6021 – 6047 (Invited Article published as a Perspective).
88. Lo, K. K.-W.;* Leung, S.-K.; Pan, C.-Y. Luminescent Iridium(III) Arylbenzothiazole Complexes: Photophysics, Electrochemistry, Bioconjugation, and Cellular Uptake, *Inorganica Chimica Acta* **2012**, *380*, 343 – 349 (Invited article included in the special issue *Chemistry – The Next Generation*).
89. Wang, Y.; Li, Steve; Kershaw, S. V.;* Hetsch, F.; Tam, A. Y.-Y.; Shan, G.; Susha, A. S.; Ko, C.-C.; Yam, V. W.-W.; Lo, K. K.-W.;* Rogach, A. L. Design of a Water-Soluble Hybrid Nanocomposite of CdTe Quantum Dots and an Iridium Complex for Photoinduced Charge Transfer, *ChemPhysChem* **2012**, *13*, 2589 – 2595.
90. Louie, M.-W.; Choi, A. W.-T.; Liu, H.-W.; Chan, B. T.-N.; Lo, K. K.-W.* Synthesis, Emission Characteristics, Cellular Studies, and Bioconjugation Properties of Luminescent Rhenium(I) Polypyridine Complexes with a Fluorous Pendant, *Organometallics* **2012**, *31*, 5844 – 5855.
91. Li, S. P.-Y.; Tang, T. S.-M.; Yiu, K. S.-M.; Lo, K. K.-W.* Cyclometalated Iridium(III) Polyamine Complexes with Intense and Long-lived Multicolor Phosphorescence: Synthesis, Crystal Structure, Photophysical Behavior, Cellular Uptake, and Transfection Properties, *Chemistry – A European Journal* **2012**, *18*, 13342 – 13354.
92. Lo, K. K.-W.; Zhang, K. Y. Iridium(III) Complexes as Therapeutic and Bioimaging

- Reagents for Cellular Applications, *RSC Advances* **2012**, 2, in press (Invited article).
93. Wang, B.; Liang, Y.; Dong, H.; Tan, T.; Zhan, B.; Cheng, J.; Lo, K. K.-W.; Lam, Y.-W.; Cheng, S.-H. A Luminescent Cyclometalated Iridium(III) Complex Accumulates in Mitochondria and Induces Mitochondrial Shortening by Conjugation to Specific Protein Targets, *ChemBioChem* **2012**, 13, in press.
94. Lo, K. K.-W.; Chan, B. T.-K.; Liu, H.-W.; Zhang, K. Y.; Li, S. P.-Y.; Tang, T. S.-M. Cyclometalated Iridium(III) Polypyridine Dibenzocyclooctyne Complexes as the First Phosphorescent Bioorthogonal Probes. *Chemical Communications* **2012**, 48, in press (Invited article to be included in the special issue *Emerging Investigators 2013*).
- Book Chapters*
1. Yam, V. W.-W.; Lo, K. K.-W. Luminescent Behavior of Polynuclear Metal Complexes of Copper(I), Silver(I) and Gold(I). In *Molecular and Supramolecular Photochemistry*, Vol. 4.; Ramamurthy, V. Schanze, K. S., Eds.; Marcel Dekker: New York, 1999; pp 31 – 112.
 2. Yam, V. W.-W.; Lo, K. K.-W. Luminescence Behavior and Photochemistry of Organotransition Metal Compounds. In *Encyclopedia of Inorganic Chemistry*, 2nd ed.; King, R. B., Ed.; Wiley: London, 2005; pp 2748 – 2779.
 3. Lo, K. K.-W.; Lau, J. S.-Y. Design of Transition Metal Biotin Complexes as Non-Covalent Probes for Avidin. In *Coordination Chemistry Research Trends*; Columbus, F., Ed.; Nova: New York, 2008; pp 175 – 200.
 4. Lo, K. K.-W. Exploitation of Luminescent Organometallic Rhenium(I) and Iridium(III) Complexes in Biological Studies. In *Topics on Organometallic Chemistry*; Lees, A. J., Ed.; Springer: Heidelberg, 2010, pp 115 – 158.
 5. Lo, K. K.-W.; Li, S. P.-Y. Luminescent Transition-Metal Complexes as Biomolecular and Cellular Probes. In *Molecular Design and Applications of Photofunctional Polymers and Materials*; Wong, R. W.-Y.; Abd-El-Aziz, A. S., Eds.; RSC: Cambridge, 2012, pp 130 – 198.
 6. Lo, K. K.-W.; Zhang, K. Y. Chemosensing and Diagnostics. In *Coordination and Organometallic Chemistry* (Volume 8) of *Comprehensive Inorganic Chemistry II*; Yam, V. W.-W. Ed.; Elsevier: Amsterdam, 2013, in press.
- Selected Community Services**
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| Associate Head of Department | 2010 – 2011 |
| BSc Programme Committee (Chairman) | 2010 – present |
| Research Degree Coordinator | 2007 – present |
| College Graduate Studies Committee (Deputy Chairman) | 2007 – present |
| Senate | 2009 – 2011 |
| Board of Undergraduate Studies | 2011 – 2012 |
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