

Mohammed Bakir

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Polymer-supported CuPd nanoalloy as a synergistic catalyst for electrocatalytic reduction of carbon dioxide to methane. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15809-15814.	7.1	140
2	Reversible interconversion between a nitrido complex of osmium(VI) and an ammine complex of osmium(II). Journal of the American Chemical Society, 1990, 112, 5507-5514.	13.7	91
3	Electrochemical properties of the first Re(I) carbonyl compound of di-2-pyridyl ketone oxime (dpk.oxime), fac-Re(CO) ₃ (dpk.oxime)Cl, in non-aqueous media. Journal of Electroanalytical Chemistry, 1999, 466, 60-66.	3.8	64
4	Rhenium(I) di- and tri-carbonyl compounds of polypyridyl-like ligands: electrochemical reactions of fac-[Re(CO) ₃ (dpk)Cl] (dpk = di-2-pyridyl ketone) with electrophiles and Group I and II metal ions. Journal of the Chemical Society Dalton Transactions, 1997, , 3571.	1.1	60
5	Preparation of phosphoraniminato complexes containing polypyridyl ligands. Nitrogen atom transfer from dichloronitrido(terpyridine)osmium(1+). Inorganic Chemistry, 1991, 30, 2835-2836.	4.0	55
6	Synthesis, characterization and molecular sensing behavior of [ZnCl ₂ (1-3-N,N,O-dpkbh)] (dpkbh=di-2-pyridyl ketone benzoyl hydrazone). Journal of Molecular Structure, 2008, 873, 17-28.	3.6	51
7	Electrochemical reactions of CO ₂ with fac-Re(dpk)(CO) ₃ Cl (dpk = di-2-pyridyl ketone). Journal of Electroanalytical Chemistry, 1997, 425, 61-66.	3.8	47
8	Nitrogen atom transfer and redox chemistry of terpyridyl phosphoraniminato complexes of osmium (IV). Inorganica Chimica Acta, 1998, 270, 511-526.	2.4	46
9	X-ray crystallographic, electrochemical and spectroscopic properties of 2-pyridinio 2-pyridyl ketone phenyl hydrazone chloride hydrate. Journal of Molecular Structure, 2004, 688, 213-222.	3.6	42
10	Unusual stabilization of trans-2,2'-bipyridine ligands in a rhenium(V) phenylimido complex. Inorganic Chemistry, 1992, 31, 1127-1129.	4.0	39
11	Electro-optical properties of the first rhenium-hydrazone complex, fac-Re(CO) ₃ (dpknph)*Cl. Transition Metal Chemistry, 1999, 24, 384-388.	1.4	36
12	Photophysics and photochemistry of rhenium(V)-nitrogen triple bonds. Coordination Chemistry Reviews, 1991, 111, 27-32.	18.8	31
13	Mononuclear rhenium(III) and rhenium(II) complexes of 1,2-bis(diphenylphosphino)ethylene: The structure of trans-ReCl ₂ (dppee) ₂ . Polyhedron, 1987, 6, 907-913.	2.2	30
14	Metal-mediated reduction of alkanenitriles to imido ligands. Formation of the imido complexes Re(NCH ₂ R) ₃ (dppbe) (R = Me, Et, iso-Pr; X = Cl, Br) from the reactions of the octahalodirhenate(III) anions with 1,2-bis(diphenylphosphino)benzene in nitrile solvents (RCN). Inorganic Chemistry, 1990, 29, 2055-2061.	4.0	27
15	Optosensing properties of fac-Re(CO) ₃ (dpknph)Cl (dpknph=di-2-pyridyl ketone p-nitrophenyl) Tj ETQq1 1 0.784314 rgBT / Overlock 10 10	5.5	27
16	Synthesis and characterization of a cadmium-dichloro compound of di-2-pyridyl ketone thiophene-2-carboxylic acid hydrazone (di-2-pyridyl ketone thiophene-2-carboxylic acid hydrazone) Tj ETQq0 0 0 rgBT / Overlock 10 Tf 50 142	2.2	25
17	Coordination Chemistry, 2007, 60, 2385-2399.		
17	Optical, electrochemical and structural studies on the first rhenium compound of di-2-pyridylketonephenylhydrazone (dpkphh), fac-Re(CO) ₃ (dpkphh)Cl. Inorganica Chimica Acta, 2002, 332, 1-6.	2.4	24
18	Molecular structure and optosensing behavior of di-2-pyridyl ketone benzoylhydrazone in non-aqueous solvents. Journal of Molecular Structure, 2002, 609, 129-136.	3.6	23

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19	Synthesis, Characterization and Structural Studies on the First Rhenium Complex with Di(2-pyridyl) Ketone 2,4-Dinitrophenylhydrazone (dpkdnph), fac-[Re(CO) ₃ (dpkdnph)Cl]. <i>European Journal of Inorganic Chemistry</i> , 2002, 2002, 481-486.	2.0	22
20	Reduction of nitriles to imido-species by quadruply bonded dirhenium(III) complexes. <i>Inorganic Chemistry</i> , 1988, 27, 2016-2017.	4.0	21
21	Spectroscopic and electrochemical properties of di-2-thienyl ketone thiosemicarbazone (dtktsc): electrochemical reactions with electrophiles (H ⁺ and CO ₂). <i>Electrochimica Acta</i> , 2016, 212, 1010-1020.	5.2	21
22	Manganese carbonyl compounds of N,N-bidentate di-2-pyridylketone (dpk) and N,O,N-tridentate hydroxybis(2-pyridyl)methanolato (dpkO,OH). The structure of fac-[Mn(CO) ₃ (dpkO,OH)]. <i>Journal of Molecular Structure</i> , 2003, 657, 75-83.	3.6	20
23	X-ray crystallographic and optosensing studies of di-2-pyridyl ketone p-nitrophenylhydrazone (dpknph) in dimethylsulfoxide (dmsO). <i>Journal of Molecular Structure</i> , 2002, 641, 183-191.	3.6	18
24	Optical, electrochemical and structural studies of the first rhenium compound of di-2-pyridylketone benzoylhydrazone (dpkbz) fac-Re(CO) ₃ (dpkbh)Cl. <i>Inorganica Chimica Acta</i> , 2003, 353, 89-98.	2.4	18
25	Synthesis, spectroscopy, thermodynamics and structure of [ZnCl ₂ (\hat{I} -3-dpktch)] (\hat{I} -3-dpktch = N,N,O) Tj ETQq1 1 0.784314 rjB 61, 3066-3079.	2.2	18
26	Synthesis, characterization and molecular sensing capability of fac-[Re(CO) ₃ (\hat{I} -2-N,N-dpktsc)Cl] where dpktsc=di-2-pyridylketone thiosemicarbazone. <i>Journal of Molecular Structure</i> , 2009, 930, 65-71.	3.6	18
27	Studies on the .alpha. and .beta. isomers of complexes of the type Re ₂ X ₄ (LL) ₂ . Structural characterization of .alpha.- and .beta.-bis[cis-bis(diphenylphosphino)ethene]tetrachlorodirhenium. <i>Inorganic Chemistry</i> , 1988, 27, 2460-2466.	4.0	17
28	Optosensing properties of fac-Re(CO) ₃ (dpknph)Cl (dpknph=di-2-pyridyl ketone p-nitrophenyl hydrazone) toward chemotactic N-formylamino acids. <i>Talanta</i> , 2002, 56, 1117-1121.	5.5	17
29	Mikanolide from Jamaican Mikania micrantha. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2004, 60, o798-o800.	0.4	17
30	Molecular sensing behavior of the first Mn(I)-compound of di-2-pyridylketone-p-nitrophenylhydrazone (dpknph), fac-[Mn(CO) ₃ (dpknph)Br]. <i>Inorganica Chimica Acta</i> , 2005, 358, 1835-1840.	2.4	17
31	Monosaccharide optical sensor based on ruthenium(II)-bis(bipyridine) of 4-nitrophenyl-di-2-pyridyl ketone hydrazone (dpknph), [Ru(bipy) ₂ (dpknph)]Cl ₂ . <i>Journal of Molecular Structure</i> , 2005, 753, 35-39.	3.6	17
32	Spectroscopic, electrochemical and X-ray crystallographic properties of a novel palladium(II) complex of thioamide deprotonated di-2-pyridyl ketone thiosemicarbazone (dpktsc-H) ⁻ . <i>Journal of Coordination Chemistry</i> , 2017, 70, 3048-3064.	2.2	17
33	Structural, electrochemical and optical properties of di-2-pyridyl ketone 2-furoic acid hydrazone (dpkfah). <i>Journal of Molecular Structure</i> , 2003, 649, 133-142.	3.6	16
34	Spectroscopic and electrochemical properties of group 12 acetates of di-2-pyridylketone thiophene-2-carboxylic acid hydrazone (dpktch-H) complexes. The structure of [Cd(\hat{I} -3-N,N,O-dpktch-H) ₂]. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 146, 323-330.	3.9	16
35	X-ray crystallographic, spectroscopic and molecular sensing properties of fac-tricarbonylchloro(di-2-pyridylketonebenzoylhydrazone)rhenium(I) dimethylformamide solvate. <i>Journal of Molecular Structure</i> , 2004, 691, 265-272.	3.6	14
36	Spectroscopic and electrochemical properties of di-2-pyridyl ketone thiosemicarbazone [dpktsc] in non-aqueous media. <i>Journal of Molecular Structure</i> , 2011, 1006, 402-408.	3.6	14

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37	Molybdenum complexes of 1,2-bis(diphenylphosphino)benzene. Mononuclear molybdenum(II) species formed by facile metal-metal bond cleavage of the (Mo ₄ -MO) ⁴⁺ core. <i>Inorganic Chemistry</i> , 1988, 27, 2608-2612.	4.0	13
38	Optosensing behavior of the first Ru(II)-compound of di-2-pyridylketone- p -nitrophenylhydrazone (dpknph), [Ru(bpy) ₂ (dpknph)]Cl ₂ . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2123-2129.	3.9	13
39	Dimolybdenum(II) complexes that contain the ligand cis-1,2-bis(diphenylphosphino)ethene (dppee). Synthesis and characterization of the .alpha.- and .beta.-isomers of Mo ₂ X ₄ (dppee) ₂ (X = Cl, Br). <i>Inorganic Chemistry</i> , 1988, 27, 4197-4202.	4.0	12
40	Binding and Reduction of Silver Ions in Thin Polymeric Films of poly-[Fe(vbpy) ₂ (CN) ₂],poly-vbpy. <i>Inorganic Chemistry</i> , 1994, 33, 3945-3951.	4.0	12
41	Di-2-pyridyl ketone-p-aminobenzoylhydrazone hydrate. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2002, 58, o263-o265.	0.4	12
42	Synthesis and characterization of phenylimidorhenium(V) compounds containing polypyridyl ligands. Crystal structures of mer-[Re(NPh)Cl ₃ (bipy)], trans-[Re(NPh)(OEt)(bipy) ₂][PF ₆] ₂ and trans-[Re(NPh)Cl ₂ (terpy)][PF ₆] ₂ (bipy = 2,2'-bipyridine, terpy = 2,2':6''-terpyridine). <i>Journal of the Chemical Society Dalton Transactions</i> , 1995, , 1733-1738.	1.1	11
43	Catalytic C-C cross-coupling and hydrogen evolution by two Pd(II)-complexes of di-2-pyridyl ketone benzoyl hydrazones. <i>Journal of Coordination Chemistry</i> , 2019, 72, 2261-2278.	2.2	11
44	Complexes of the type Mo ₂ (O ₂ CR) ₂ X ₂ (L ⁻ ,L) in which the bidentate phosphine ligands L ⁻ ,L straddle the Mo ^{VI} -1/2Mo bond. <i>Polyhedron</i> , 1988, 7, 1279-1284.	2.2	10
45	Molecular sensing behavior of di-2-pyridyl ketone p-aminophenylhydrazone hydrate (dpkabH ₂ O) in non-aqueous media. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 72, 50-55.	3.9	10
46	Synthesis, solution properties, and solid-state structural analysis of [Mn(²⁻ N,N,S,N-dpktsc)Br] ₂ ·CH ₃ CN (i = 1, or 0) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td</i> 2014, 67, 249-264.	2.2	10
47	X-ray crystallographic and molecular sensing properties of [(²⁻ N,N,N'-dpknph)] (dpknph=di-2-pyridyl) <i>Tj ETQq1 1 0,784314,rgBT /Overlock 10 Tf 50 302 Td</i> 3.6	3.6	10
48	Spectroscopic, and electrochemical studies of [MCl ₂ (¹⁻ 2-N,N-dpktsc)] (M=Zn, Cd, Hg and) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td</i> 3.6	3.6	9
49	The isolation and characterization of the first examples of pairs of ^{1±} - and ¹² -isomers of dirhenium(II) of type Re ₂ X ₄ (LL) ₂ (X = Cl or Br, LL = bidentate phosphine ligand). <i>Polyhedron</i> , 1987, 6, 1483-1489.	2.2	8
50	Coordination Chemistry in Thin Polymeric Films of poly-[Fe(vbpy) ₂ (CN) ₂],poly-vbpy. Binding and Reduction of [Rh(COD)Cl] and PdCl ₂ . <i>Chemistry of Materials</i> , 1996, 8, 2461-2467.	6.7	8
51	The optical sensorfac-tricarbonylchloro(di-2-pyridylmethanonep-nitrophenylhydrazone)rhenium(I) dimethyl sulfoxide solvate. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2001, 57, 1371-1373.	0.4	8
52	Synthesis and structure of the first molybdenum compound of N,O,N-hydroxybis(2-pyridyl)methanolato (¹⁻ 3-dpkO,â€‰OH). The structure of [Mo(O) ₂ (¹ 4-O)(¹⁻ 3-dpkO,â€‰OH)] ₂ ·2H ₂ O <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td</i> 2.2	2.2	8
53	X-ray crystallographic, spectroscopic, and electrochemical properties of Group 12 metal-chlorides of di-2-pyridyl ketone acetic acid hydrazone (dpkaah). <i>Journal of Coordination Chemistry</i> , 2018, 71, 2322-2339.	2.2	8
54	X-ray crystallographic, spectroscopic and electrochemical properties of a bi-stable di-2-thienyl ketone 2,4-dinitrophenyl hydrazone (dtkdnph). <i>Journal of Molecular Structure</i> , 2018, 1173, 942-950.	3.6	8

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55	Novel η^2 -Nim,S- and η^4 -C,Nim, $(\eta^4$ -S), $(\eta^4$ -S)-coordination of di-2-thienyl ketone thiosemicarbazone (dtkts). Hydrogen evolution and catalytic properties of palladacyclic $[\text{Pd}(\eta^4$ -C,Nim, $(\eta^4$ -S), $(\eta^4$ -S)-dtkts-2H)] ₄ . <i>Inorganica Chimica Acta</i> , 2020, 507, 119592.	2.4	8
56	The first rhenium(V)-imido compounds containing two chelating phosphine ligands of the type $\text{trans-}[\text{Re}(\text{NPh})\text{X}(\text{L-L})_2]^{2+}$ (L-L = bidentate phosphine ligand; X = halide or hydroxide). The structure of $\text{trans-}[\text{Re}(\text{NPh})(\text{OH})(\text{dppbe})_2]$ $(\text{ClO}_4)_2 \cdot 2\text{H}_2\text{O}$. <i>Inorganica Chimica Acta</i> , 1997, 254, 9-17.	2.4	7
57	The first pyridylN, η^2 -coordinated di-2-pyridyl ketone oxime, $\text{fac-tricarbonylchloro}(\text{di-2-pyridyl ketone})$ Tj ETQq1 1 0.784314 rgBT /Ov Communications, 2001, 57, 1154-1156.	0.4	7
58	Molecular sensing behavior of di-2-pyridylketone-2-thenoylhydrazone (dpktah) in non-aqueous media. <i>Journal of Molecular Structure</i> , 2007, 833, 161-168.	3.6	7
59	Synthesis, characterization and structure of the first rhenium compound of di-2-pyridyl ketone thiophene-2-carboxylic acid hydrazone (dpktah), $\text{fac-}[\text{Re}(\text{CO})_3(\text{N,N-}\eta^2\text{-dpktah})\text{Cl}]$. <i>Journal of Molecular Structure</i> , 2009, 918, 138-145.	3.6	7
60	X-ray crystallographic, spectroscopic, and electrochemical properties of $[\text{HgCl}_2(\eta^2\text{-N,N}\eta^2\text{-dpktch})]$ ($\eta^2\text{-N,N}\eta^2\text{-dpktch}$ =di-2-pyridyl ketone thiophene-2-carboxylic acid hydrazone). <i>Journal of Molecular Structure</i> , 2009, 921, 51-57.	3.6	7
61	Isolation of the complexes $(n\text{-Bu}_4\text{N})_2[(\text{Re}_2\text{Cl}_7)_2\{\eta^4\text{-}(\text{L}^--\text{L})\}]$, where $\text{L}^--\text{L} = \text{Ph}_2\text{PC}(\eta^4\text{-CPhPh}_2)$ or $\text{trans-Ph}_2\text{PCH}(\eta^4\text{-CPhPh}_2)$. The first examples of quadruply bonded dirhenium(III) anions of the type $[\text{Re}_2\text{Cl}_7]^{4-}$. <i>Polyhedron</i> , 1987, 6, 1925-1927.	2.2	6
62	Nuclear magnetic resonance and optosensing properties of di-2-thienyl ketone p-nitrophenylhydrazone (DSKNPH) in non-aqueous media. <i>Talanta</i> , 2004, 62, 781-789.	5.5	6
63	Rhenium tricarbonyl chloro of di-2-pyridylketone 4-aminobenzoyl hydrazone (dpk4abh), $\text{fac-}[\text{Re}(\text{CO})_3(\eta^2\text{-N,N-dpk4abh})\text{Cl}]$: Synthesis, spectroscopic and electrochemical properties. <i>Journal of Molecular Structure</i> , 2011, 996, 24-30.	3.6	6
64	$\text{fac-Tricarbonyl}[\text{hydroxybis}(2\text{-pyridyl})\text{methanolato-}\eta^3\text{N,O,N}\eta^2]$ rhenium(I). <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2002, 58, m74-m76.	0.4	5
65	Synthesis, spectroscopic and X-ray crystallographic properties of manganese compounds of keto- and enol-coordinated di-2-pyridyl ketone benzoyl hydrazone (dpkbh). Reactions of $[\text{Mn}(\text{CO})_5\text{Br}]$ with dpkbh. <i>Journal of Coordination Chemistry</i> , 2016, 69, 1244-1257.	2.2	5
66	Synthesis, spectroscopic, and X-ray crystallographic analysis of manganese compounds of di-2-pyridyl ketone thiophene-2-carboxylic acid hydrazone (dpktch): The reaction of $\text{Mn}(\text{CO})_5\text{Br}$ with dpktch. <i>Journal of Molecular Structure</i> , 2010, 967, 174-182.	3.6	4
67	$\text{trans-Bis}(\text{glycinato-}\eta^2\text{N,O})\text{copper(II)}$ 4-bromophenol solvate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2004, 60, m868-m870.	0.2	3
68	7-Acetyl-12-methoxyhorminone from Jamaican <i>Hyptis verticillata</i> (Labiatae). <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2006, 62, o306-o308.	0.2	3
69	Synthesis, and molecular sensing behavior of $\text{fac-}[\text{Re}(\text{CO})_3(\eta^2\text{-N,N-dpksc})\text{Cl}]$, dpksc=di-2-pyridyl ketone semicarbazone. <i>Journal of Molecular Structure</i> , 2013, 1032, 118-125.	3.6	3
70	Polymorphic di-2-pyridyl ketone 4-nitrophenylhydrazone (dpknph): the structure of η^2 -dpknph. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2005, 61, o607-o609.	0.4	2
71	5-[(4-Methylphenyl)diazanyl]salicylaldehyde. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2005, 61, o1611-o1613.	0.2	2
72	Physico-chemical properties of the first metal compound of di-2-pyridylketone p-nitrophenoxyacetic acid hydrazone (dpknxh), $\text{fac-}[\text{Re}(\text{CO})_3(\eta^2\text{-N,N-dpknxh})\text{Cl}]$. <i>Journal of Coordination Chemistry</i> , 2019, 72, 3657-3673.	2.2	2

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73	Physicochemical and X-ray crystallographic properties of the first rhenium compound of benzophenone thiosemicarbazone (bptsc), fac-[Re(CO) ₃ (^η 2-Nim,S-bptsc)Cl]. <i>Journal of Molecular Structure</i> , 2021, 1235, 130135.	3.6	2
74	cis-Dicarbonyl(hydroxydi-2-pyridylmethanolato- ^η 3N,O,Nâ€²)(triphenylphosphine- ^η P)rhenium(I) dimethyl sulfoxide hemisolvate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2004, 60, m1966-m1969.	0.2	1
75	Porous solvent-free ^η 4-2-bis(salicylidene)propane-1,3-diaminato-bis{[bis(salicylidene)propane-1,3-diaminato]iron(III)}. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2005, 61, m1464-m1466.	0.2	1
76	catena-Poly[[[aqua(propane-1,3-diamine- ^η 2N,Nâ€²)copper(II)]- ^η 4-fumarato- ^η 2O:Oâ€²] monohydrate]. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2008, 64, m303-m304.	0.2	1
77	Synthesis and physicochemical properties of <i>fac</i> -[Re(CO) ₃ (^η 2-N,N-dpkfah)Cl], dpkfah=di-2-pyridyl ketone 2-furoic acid hydrazone: the molecular structure of <i>fac</i> -[Re(CO) ₃ (^η 2-N,N-dpkfah)Cl]â€•acetone. <i>Journal of Coordination Chemistry</i> , 2011, 64, 1743-1757.	2.2	0