# The Biologically Relevant Coordination Chemistry of Ir
# Structure and Reactivity

Chemical Reviews

121, 14682-14905

DOI: 10.1021/acs.chemrev.1c00253

Citation Report

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Why intermolecular nitric oxide (NO) transfer? Exploring the factors and mechanistic aspects of NO transfer reaction. Chemical Science, 2022, 13, 1706-1714. | 3.7 | 5 |
| 2 | Synthesis and characterization of a model complex for flavodiiron NO reductases that stabilizes a diiron mononitrosyl complex. Journal of Inorganic Biochemistry, 2022, 229, 111723. | 1.5 | 3 |
| 3 | Controlling the Direction of S-Nitrosation versus Denitrosation: Reversible Cleavage and Formation of an Sâ€“N Bond within a Dicopper Center. Journal of the American Chemical Society, 2022, 144, 2867-2872. | 6.6 | 5 |
| 4 | Simultaneous binding of heme and Cu with amyloid Î² peptides: active site and reactivities. Dalton Transactions, 2022, 51, 4986-4999. | 1.6 | 7 |
| 5 | Ruthenium-nitrosyl complexes as NO-releasing molecules, potential anticancer drugs, and photoswitches based on linkage isomerism. Dalton Transactions, 2022, 51, 5367-5393. | 1.6 | 35 |
| 6 | Albumin as a prospective carrier of the nitrosyl iron complex with thiourea and thiosulfate ligands under aerobic conditions. Dalton Transactions, 2022, 51, 6473-6485. | 1.6 | 6 |
| 7 | Defenses of multidrug resistant pathogens against reactive nitrogen species produced in infected hosts. Advances in Microbial Physiology, 2022, 80, 85-155. | 1.0 | 6 |
| 8 | Triphenylmethyl Thionitrite: An Efficient NO Transfer Reagent During the Synthesis of a Triruthenium Nitrosyl Cluster. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2022, 648, . | 0.6 | 1 |
| 9 | Formation of polynuclear iron(III) complexes of N-(2-pyridylmethyl)iminodipropanol depending on pseudohalide ions: synthesis, crystal structure, and magnetic properties. Journal of Industrial and Engineering Chemistry, 2022, , . | 2.9 | 0 |
| 10 | Recent developments in the synthesis of bio-inspired iron porphyrins for small molecule activation. Chemical Communications, 2022, 58, 5808-5828. | 2.2 | 9 |
| 11 | A Copper(II)â€Nitrite Complex Hydrogenâ€Bonded to a Protonated Amine in the Secondâ€Coordinationâ€Sphere. European Journal of Inorganic Chemistry, 2022, 2022, . | 1.0 | 3 |
| 12 | Mechanisms of nitric oxide reactions with globins using mammalian myoglobin as a model system. Journal of Inorganic Biochemistry, 2022, 233, 111839. | 1.5 | 6 |
| 13 | Characterization of a Half-Bent RuNO Mode on a Dinuclear Ruthenium Complex through Reduction Reaction. Bulletin of the Chemical Society of Japan, 2022, 95, 1214-1216. | 2.0 | 0 |
| 14 | Cu<sup>II</sup> Lewis Acid, Proton-Coupled Electron Transfer Mechanism for Cu-Metalâ€“Organic Framework-Catalyzed NO Release from S-Nitrosoglutathione. ACS Catalysis, 2022, 12, 8055-8068. | 5.5 | 5 |
| 15 | Structural characterization of the water-soluble porphyrin complexes [FeII(TPPS) (NOâ€¢)]4â”€ and [Î¼-O-([FeIII(TPPS)])2]8â”€. Heliyon, 2022, 8, e09555. | 1.4 | 0 |
| 16 | Anionic dinitrosyl iron complexes â€“ new nitric oxide donors with selective toxicity to human glioblastoma cells. Journal of Molecular Structure, 2022, 1266, 133506. | 1.8 | 3 |
| 17 | Visible-light NO photolysis of ruthenium nitrosyl complexes with N<sub>2</sub>O<sub>2</sub> ligands bearing Ï€-extended rings and their photorelease dynamics. Dalton Transactions, 2022, 51, 11404-11415. | 1.6 | 1 |
| 18 | Effect of solvents and glutathione on the decomposition of the nitrosyl iron complex with N-ethylthiourea ligands: An experimental and theoretical study. Journal of Inorganic Biochemistry, 2022, 235, 111926. | 1.5 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | NO Coupling at Copper to cis-Hyponitrite: N<sub>2</sub>O Formation via Protonation and H-Atom Transfer. Journal of the American Chemical Society, 2022, 144, 15093-15099. | 6.6 | 5 |
| 20 | Nontoxic Tb<sup>3+</sup>-induced hyaluronic nano-poached egg aggregates for colorimetric and luminescent detection of Fe<sup>3+</sup> ions. RSC Advances, 2022, 12, 22285-22294. | 1.7 | 2 |
| 21 | Adventures in the photo-uncaging of small molecule bioregulators. Advances in Inorganic Chemistry, 2022, , . | 0.4 | 0 |
| 22 | Features of the decomposition of the nitrosyl iron complex with thiourea ligands under aerobic conditions: experiment and kinetic and quantum chemical modeling. Russian Chemical Bulletin, 2022, 71, 1604-1613. | 0.4 | 5 |
| 23 | What Is the Right Level of Activation of a High-Spin {FeNO}<sup>7</sup> Complex to Enable Direct Nâ€“N Coupling? Mechanistic Insight into Flavodiiron NO Reductases. Journal of the American Chemical Society, 2022, 144, 16395-16409. | 6.6 | 5 |
| 24 | Nitrosylation of ferric zebrafish nitrobindin: A spectroscopic, kinetic, and thermodynamic study. Journal of Inorganic Biochemistry, 2022, , 111996. | 1.5 | 4 |
| 25 | The crystal structure of nitroxyl-ÎºN-{hydridotris(3-trifluoromethyl-5-methylpyrazolyl-1-yl-ÎºN<sup>3</sup>)borato}nickel(II), C<sub>15</sub>H<sub>13</sub>BF<sub>9</sub>N<sub>7</sub>NiO. Zeitschrift Fur Kristallographie - New Crystal Structures, 2022, . | 0.1 | 0 |
| 26 | The Role of Heme Peroxo Oxidants in the Rational Mechanistic Modeling of Nitric Oxide Synthase: Characterization of Key Intermediates and Elucidation of the Mechanism. Angewandte Chemie - International Edition, 0, , . | 7.2 | 1 |
| 27 | Chemistry of a Nitrosyl Ligand Îº:Î·-Bridging a Ditungsten Center: Rearrangement and Nâ€“O Bond Cleavage Reactions. Inorganic Chemistry, 2022, 61, 14929-14933. | 1.9 | 2 |
| 28 | The Role of Heme Peroxo Oxidants in the Rational Mechanistic Modeling of Nitric Oxide Synthase: Characterization of Key Intermediates and Elucidation of the Mechanism. Angewandte Chemie, 0, , . | 1.6 | 0 |
| 29 | Stable Bimetallic Fe<sup>II</sup>/{Fe(NO)<sub>2</sub>}<sup>9</sup> Moiety Derived from Reductive Transformations of a Diferrous-dinitrosyl Species. Inorganic Chemistry, 2022, 61, 16325-16332. | 1.9 | 2 |
| 30 | Particle Swarm Fitting of Spin Hamiltonians: Magnetic Circular Dichroism of Reduced and NO-Bound Flavodiiron Protein. Inorganic Chemistry, 2022, 61, 16520-16527. | 1.9 | 1 |
| 31 | Novel Type of Tetranitrosyl Iron Salt: Synthesis, Structure and Antibacterial Activity of Complex [FeLâ€™2(NO)2][FeLâ€™Lâ€(NO)2] with Lâ€™-thiobenzamide and Lâ€•thiosulfate. Molecules, 2022, 27, 6886. | 1.7 | 2 |
| 32 | Recent progress in nitric oxide-generating nanomedicine for cancer therapy. Journal of Controlled Release, 2022, 352, 179-198. | 4.8 | 14 |
| 33 | Positive (Regulatory) and Negative (Cytotoxic) Effects of Dinitrosyl Iron Complexes on Living Organisms. Biochemistry (Moscow), 2022, 87, 1367-1386. | 0.7 | 4 |
| 34 | Role of a Redox-Active Ligand Close to a Dinuclear Activating Framework. Topics in Organometallic Chemistry, 2022, , . | 0.7 | 0 |
| 35 | Ordered Motions in the Nitric-Oxide Dioxygenase Mechanism of Flavohemoglobin and Assorted Globins with Tightly Coupled Reductases. Advances in Experimental Medicine and Biology, 2022, , . | 0.8 | 0 |
| 36 | Antiviral Activity of Nitrosonium Cations against SARS-CoV-2 on a Syrian Hamster Model. Biophysics (Russian Federation), 2022, 67, 785-795. | 0.2 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | NEW VARIANTS OF DINITROSYL IRON COMPLEXES. ANTIOXIDANT AND ANTIRADICAL EFFECT. , 2022, 7, 624-627. | | 0 |
| 38 | Research into Dinitrosyl Iron Complexes in Living Organisms Through EPR as an Example of Applying this Method in Biology: A Review. Applied Magnetic Resonance, 2023, 54, 289-309. | 0.6 | 2 |
| 39 | Electronic Configurations and the Effect of Peripheral Substituents of (Nitrosyl)iron Corroles. Inorganic Chemistry, 2022, 61, 20385-20396. | 1.9 | 0 |
| 40 | Role of Nitric Oxide-Derived Metabolites in Reactions of Methylglyoxal with Lysine and Lysine-Rich Protein Leghemoglobin. International Journal of Molecular Sciences, 2023, 24, 168. | 1.8 | 3 |
| 41 | Reductive NO Coupling at Dicopper Center via a [Cu<sub>2</sub>(NO)<sub>2</sub>]<sup>2+</sup> Diamond-Core Intermediate. Journal of the American Chemical Society, 2022, 144, 22633-22640. | 6.6 | 2 |
| 42 | One-Pot Photosynthesis of Cubic Fe@Fe<sub>3</sub>O<sub>4</sub> Coreâ€“Shell Nanoparticle Well-Dispersed in N-Doping Carbonaceous Polymer Using a Molecular Dinitrosyl Iron Precursor. Inorganic Chemistry, 2022, 61, 20719-20724. | 1.9 | 1 |
| 43 | Involvement of Nitric Oxide in Protecting against Radical Species and Autoregulation of M1-Polarized Macrophages through Metabolic Remodeling. Molecules, 2023, 28, 814. | 1.7 | 6 |
| 44 | Reductive Coupling of Nitric Oxide by Cu(I): Stepwise Formation of Mono- and Dinitrosyl Species En Route to a Cupric Hyponitrite Intermediate. Journal of the American Chemical Society, 2023, 145, 2230-2242. | 6.6 | 1 |
| 45 | Electrochemical Investigations on the NO-Releasing Property of Ruthenium Nitrosyl Complex. Asian Journal of Chemistry, 2023, 35, 52-56. | 0.1 | 1 |
| 46 | NO and Heme Proteins: Cross-Talk between Heme and Cysteine Residues. Antioxidants, 2023, 12, 321. | 2.2 | 2 |
| 47 | A nitrosyl iron complex with 3.4-dichlorothiophenolyl ligands: synthesis, structures and its reactions with targets â€“ carriers of nitrogen oxide (NO) in vivo. Dalton Transactions, 2023, 52, 2641-2662. | 1.6 | 4 |
| 48 | Experimental Determination of an Isolated transâ€Dinitrosyl Manganese(II) Heme Analogue. Angewandte Chemie - International Edition, 2023, 62, . | 7.2 | 1 |
| 49 | Experimental Determination of an Isolated transâ€Dinitrosyl Manganese(II) Heme Analogue. Angewandte Chemie, 2023, 135, . | 1.6 | 0 |
| 50 | Chalcogenocarbonyl and Chalcogenonitrosyl Metal Complexes. , 2023, , 27-57. | | 0 |
| 51 | Capturing a bis-Fe(IV) State in Methylosinus trichosporium OB3b MbnH. Biochemistry, 2023, 62, 1082-1092. | 1.2 | 1 |
| 52 | Accurate non-covalent interaction energies on noisy intermediate-scale quantum computers via second-order symmetry-adapted perturbation theory. Chemical Science, 2023, 14, 3587-3599. | 3.7 | 4 |
| 53 | Acid-induced nitrite reduction of nonheme iron(<scp>ii</scp>)-nitrite: mimicking biological Feâ€“NiR reactions. Chemical Science, 2023, 14, 2935-2942. | 3.7 | 5 |
| 54 | Lightâ€induced <scp>NO</scp> release from ironâ€nitrosylâ€thiolato complex: The role of noncovalent thiol/thioether. Journal of the Chinese Chemical Society, 2023, 70, 1125-1135. | 0.8 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Exploring the nitric oxide dioxygenation (NOD) reactions of manganeseâ€“peroxo complexes. Dalton Transactions, 2023, 52, 5095-5100. | 1.6 | 3 |
| 86 | Chemical biology of reactive nitrogen species (RNS) and its application in postharvest horticultural crops. , 2024, , 75-110. | | 0 |
| 92 | Novel Plant Growth Regulators and Gaseous Signaling Molecules. , 2023, , 479-515. | | 0 |