## Chien Ho

## List of Publications by Year in descending order

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20797 34964 12,795 300 60 98 citations h-index g-index papers 310 310 310 8971 citing authors docs citations times ranked all docs

| #  | Article  | IF           | CITATIONS |
|----|--|--------------|-----------|
| 1  | In situ labeling of immune cells with iron oxide particles: An approach to detect organ rejection by cellular MRI. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1852-1857.      | 3.3          | 599       |
| 2  | Enzymatic function of hemoglobin as a nitrite reductase that produces NO under allosteric control. Journal of Clinical Investigation, 2005, 115, 2099-2107.  | 3.9          | 450       |
| 3  | Hypoxia, red blood cells, and nitrite regulate NO-dependent hypoxic vasodilation. Blood, 2006, 107, 566-574.   | 0.6          | 444       |
| 4  | Influence of globin structure on the state of the heme. I. Human deoxyhemoglobin. Biochemistry, 1974, 13, 2163-2173.   | 1,2          | 307       |
| 5  | Detection of Single Mammalian Cells by High-Resolution Magnetic Resonance Imaging. Biophysical<br>Journal, 1999, 76, 103-109.  | 0.2          | 268       |
| 6  | Human Neuroglobin Functions as a Redox-regulated Nitrite Reductase. Journal of Biological Chemistry, 2011, 286, 18277-18289.   | 1.6          | 245       |
| 7  | Influence of globin structure on the state of the heme. III. Changes in heme spectra accompanying allosteric transitions in methemoglobin and their implications for heme-heme interaction. Biochemistry, 1974, 13, 2187-2200. | 1.2          | 205       |
| 8  | STACS: new active contour scheme for cardiac MR image segmentation. IEEE Transactions on Medical Imaging, 2005, 24, 593-603.   | 5 <b>.</b> 4 | 205       |
| 9  | Intracellular labeling of T-cells with superparamagnetic contrast agents. Magnetic Resonance in Medicine, 1993, 30, 617-625.   | 1.9          | 201       |
| 10 | Quaternary structure of hemoglobin in solution. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 517-520.   | 3.3          | 197       |
| 11 | Attenuation of Myocardial Ischemia/Reperfusion Injury by Superinduction of Inducible Nitric Oxide Synthase. Circulation, 2000, 101, 2742-2748.   | 1.6          | 187       |
| 12 | Severe Controlled Cortical Impact in Rats: Assessment of Cerebral Edema, Blood Flow, and Contusion Volume. Journal of Neurotrauma, 1995, 12, 1015-1025.  | 1.7          | 183       |
| 13 | In Vivo Dynamic MRI Tracking of Rat T-Cells Labeled with Superparamagnetic Iron-Oxide Particles.<br>Magnetic Resonance in Medicine, 1995, 33, 200-208.   | 1.9          | 170       |
| 14 | Production of unmodified human adult hemoglobin in Escherichia coli Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 8108-8112.  | 3.3          | 163       |
| 15 | Macrophage Accumulation Associated With Rat Cardiac Allograft Rejection Detected by Magnetic Resonance Imaging With Ultrasmall Superparamagnetic Iron Oxide Particles. Circulation, 2001, 104, 934-938.                        | 1.6          | 152       |
| 16 | The Structureâ^Function Relationship of Hemoglobin in Solution at Atomic Resolution. Chemical Reviews, 2004, 104, 1219-1230.   | 23.0         | 150       |
| 17 | Cerebral perfusion during anesthesia with fentanyl, isoflurane, or pentobarbital in normal rats studied by arterial spin-labeled MRI. Magnetic Resonance in Medicine, 2001, 46, 202-206.                                       | 1.9          | 147       |
| 18 | Accelerated MR parameter mapping with lowâ€rank and sparsity constraints. Magnetic Resonance in Medicine, 2015, 74, 489-498.   | 1.9          | 140       |

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|----|---|------|-----------|
| 19 | New Look at Hemoglobin Allostery. Chemical Reviews, 2015, 115, 1702-1724.   | 23.0 | 132       |
| 20 | Proton nuclear magnetic resonance study of the quaternary structure of human hemoglobins in water. Biochemistry, 1975, 14, 2526-2535.   | 1.2  | 128       |
| 21 | Interactions between the quaternary structure of the globin and the spin state of the heme in ferric mixed spin derivatives of hemoglobin. Biochemistry, 1978, 17, 3640-3652.   | 1.2  | 122       |
| 22 | The Kinetics of the Hydration of Carbon Dioxide at $25 \hat{A}^\circ$ . Journal of Biological Chemistry, 1963, 238, 3499-3501.  | 1.6  | 117       |
| 23 | <sup>19</sup> F MRI detection of acute allograft rejection with in vivo perfluorocarbon labeling of immune cells. Magnetic Resonance in Medicine, 2011, 65, 1144-1153.  | 1.9  | 108       |
| 24 | The crystal structure of D-lactate dehydrogenase, a peripheral membrane respiratory enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 9413-9418.   | 3.3  | 100       |
| 25 | Conjugation of Multiple Copies of Polyethylene Glycol to Hemoglobin Facilitated Through Thiolation:<br>Influence on Hemoglobin Structure and Function. Protein Journal, 2005, 24, 133-146.  | 0.7  | 99        |
| 26 | Proton Nuclear Magnetic Resonance Studies On Hemoglobin: Cooperative Interactions And Partially Ligated Intermediates. Advances in Protein Chemistry, 1992, 43, 153-312.  | 4.4  | 92        |
| 27 | Automated probabilistic method for assigning backbone resonances of (13C,15N)-labeled proteins. Journal of Biomolecular NMR, 1997, 9, 151-166.  | 1.6  | 91        |
| 28 | Proton nuclear magnetic resonance studies of hemoglobins M Boston (.alpha.58E7 His .fwdarw. Tyr) and M Milwaukee (.beta.67E11 Val .fwdarw. Glu): spectral assignments of hyperfine-shifted proton resonances and of proximal histidine (E7) NH resonances to the .alpha. and .beta. chains of normal human adult hemoglobin. Biochemistry, 1980, 19, 5196-5202. | 1.2  | 87        |
| 29 | Incorporation of fluorotryptophans into proteins of Escherichia coli. Biochemistry, 1975, 14, 3035-3040.  | 1.2  | 86        |
| 30 | Substitutions in woolly mammoth hemoglobin confer biochemical properties adaptive for cold tolerance. Nature Genetics, 2010, 42, 536-540.   | 9.4  | 86        |
| 31 | Magnetic resonance imaging detection of rat renal transplant rejection by monitoring macrophage infiltration. Kidney International, 2000, 58, 1300-1310.  | 2.6  | 84        |
| 32 | Effects of ligands and organic phosphates on functional properties of human adult hemoglobin. Biochemistry, 1974, 13, 3653-3661.  | 1.2  | 83        |
| 33 | Cerebral Blood Flow at One Year after Controlled Cortical Impact in Rats: Assessment by Magnetic Resonance Imaging. Journal of Neurotrauma, 2002, 19, 1029-1037.  | 1.7  | 82        |
| 34 | Biliverdin Administration Prevents the Formation of Intimal Hyperplasia Induced by Vascular Injury. Circulation, 2005, 112, 587-591.  | 1.6  | 82        |
| 35 | How much do we know about the Bohr effect of hemoglobin?. Biochemistry, 1987, 26, 6299-6305.  | 1.2  | 81        |
| 36 | Production of human normal adult and fetal hemoglobins in Escherichia coli. Protein Engineering, Design and Selection, 1997, 10, 1085-1097.   | 1.0  | 81        |

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|----|--|-------------|-----------|
| 37 | Nuclear magnetic resonance studies of hemoglobins. Journal of Molecular Biology, 1971, 60, 101-111.  | 2.0         | 79        |
| 38 | Role of the .beta.146 histidyl residue in the alkaline Bohr effect of hemoglobin. Biochemistry, 1980, 19, 1043-1052.   | 1.2         | 78        |
| 39 | Assessment of Cerebral Blood Flow and CO2 Reactivity After Controlled Cortical Impact By Perfusion Magnetic Resonance Imaging Using Arterial Spin-Labeling in Rats. Journal of Cerebral Blood Flow and Metabolism, 1997, 17, 865-874.  | 2.4         | 78        |
| 40 | Magnetic Resonance Imaging Assessment of Regional Cerebral Blood Flow after Asphyxial Cardiac Arrest in Immature Rats. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 197-205.   | 2.4         | 78        |
| 41 | Effects of anions and ligands on the tertiary structure around ligand binding site in human adult hemoglobin. Biochemistry, 1973, 12, 134-139.   | 1.2         | 76        |
| 42 | A test of the role of the proximal histidines in the Perutz model for cooperativity in haemoglobin. Nature Structural and Molecular Biology, 1997, 4, 78-83.   | 3.6         | 76        |
| 43 | Angiotensin-Converting Enzyme Inhibitor Preserves p21 and Endothelial Nitric Oxide Synthase Expression in Monocrotaline-Induced Pulmonary Arterial Hypertension in Rats. Circulation, 2001, 104, 945-950.  | 1.6         | 75        |
| 44 | Characterization of the lipid-carrier involved in the synthesis of enterobacterial common antigen (ECA) and identification of a novel phosphoglyceride in a mutant of Salmonella typhimurium defective in ECA synthesis. Glycobiology, 1998, 8, 557-567.                             | 1.3         | 73        |
| 45 | Perfusion quantitation in transplanted rat kidney by MRI with arterial spin labeling. Kidney International, 1998, 53, 1783-1791.   | 2.6         | 71        |
| 46 | NMR reveals hydrogen bonds between oxygen and distal histidines in oxyhemoglobin. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 10354-10358.  | <b>3.</b> 3 | 71        |
| 47 | Early perfusion after controlled cortical impact in rats: Quantification by arterial spin-labeled MRI and the influence of spin-lattice relaxation time heterogeneity. Magnetic Resonance in Medicine, 1999, 42, 673-681.  | 1.9         | 69        |
| 48 | In vivo detection of acute rat renal allograft rejection by MRI with USPIO particles. Kidney International, 2002, 61, 1124-1135.   | 2.6         | 69        |
| 49 | Tracking T-cells in vivo with a new nano-sized MRI contrast agent. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 1345-1354.  | 1.7         | 68        |
| 50 | Longitudinal Tracking of Recipient Macrophages in a Rat Chronic Cardiac Allograft Rejection Model With Noninvasive Magnetic Resonance Imaging Using Micrometer-Sized Paramagnetic Iron Oxide Particles. Circulation, 2008, 118, 149-156.   | 1.6         | 66        |
| 51 | Contribution of Surface Histidyl Residues in the α-Chain to the Bohr Effect of Human Normal Adult Hemoglobin:  Roles of Global Electrostatic Effects. Biochemistry, 1997, 36, 6663-6673.   | 1.2         | 65        |
| 52 | Decreased reticuloendothelial system clearance and increased blood half-life and immune cell labeling for nano- and micron-sized superparamagnetic iron-oxide particles upon pre-treatment with Intralipid. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 3447-3453. | 1.1         | 65        |
| 53 | A proton nuclear magnetic resonance investigation of histidyl residues in human normal adult hemoglobin. Biochemistry, 1982, 21, 5031-5043.  | 1.2         | 64        |
| 54 | Superparamagnetic iron oxide particles transactivator protein-fluorescein isothiocyanate particle labeling for in vivo magnetic resonance imaging detection of cell migration: uptake and durability. Transplantation, 2003, 76, 1043-1046.  | 0.5         | 64        |

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|----|---|-----|-----------|
| 55 | Interactions of Bovine $\hat{l}\pm s$ -Casein with Small Ions1. Journal of the American Chemical Society, 1965, 87, 110-117.  | 6.6 | 63        |
| 56 | Proton nuclear Overhauser effect investigation of the heme pockets in ligated hemoglobin: conformational differences between oxy and carbonmonoxy forms. Biochemistry, 1985, 24, 3398-3407.   | 1.2 | 63        |
| 57 | Phosphorus nuclear magnetic resonance studies of phosphoproteins and phosphorylated molecules. II. Chemical nature of phosphorus atoms in $\hat{l}\pm 8$ -casein B and phosvitin. Biochemistry, 1969, 8, 2074-2082.                 | 1.2 | 62        |
| 58 | Fluorine-19 nuclear magnetic resonance studies of lipid phase transitions in model and biological membranes. Biochemistry, 1978, 17, 3023-3038.   | 1.2 | 62        |
| 59 | Assessment of Roles of Surface Histidyl Residues in the Molecular Basis of the Bohr Effect and of β143 Histidine in the Binding of 2,3-Bisphosphoglycerate in Human Normal Adult Hemoglobinâ€. Biochemistry, 1999, 38, 13423-13432. | 1.2 | 62        |
| 60 | USPIO-enhanced dynamic MRI: Evaluation of normal and transplanted rat kidneys. Magnetic Resonance in Medicine, 2001, 46, 1152-1163.   | 1.9 | 62        |
| 61 | Nuclear magnetic resonance and molecular genetic studies of the membrane-bound D-lactate dehydrogenase of Escherichia coli. Biochemistry, 1987, 26, 549-556.  | 1.2 | 61        |
| 62 | Noninvasive Evaluation of Cardiac Allograft Rejection by Cellular and Functional Cardiac Magnetic Resonance. JACC: Cardiovascular Imaging, 2009, 2, 731-741.  | 2.3 | 61        |
| 63 | Normal and Transplanted Rat Kidneys: Diffusion MR Imaging at 7 T. Radiology, 2004, 231, 702-709.  | 3.6 | 60        |
| 64 | An Investigation of the Ligand-Binding Site of the Glutamine-Binding Protein of Escherichia coli Using Rotational-Echo Double-Resonance NMR. Biochemistry, 1994, 33, 8651-8661.   | 1.2 | 59        |
| 65 | Chain-Selective Isotopic Labeling for NMR Studies of Large Multimeric Proteins: Application to Hemoglobin. Biophysical Journal, 2000, 79, 1146-1154.  | 0.2 | 59        |
| 66 | MRI detection of macrophages labeled using micrometer-sized iron oxide particles. Journal of Magnetic Resonance Imaging, 2007, 25, 1210-1218.   | 1.9 | 58        |
| 67 | Ligand-Free Openâ^'Closed Transitions of Periplasmic Binding Proteins: The Case of Glutamine-Binding Protein. Biochemistry, 2010, 49, 1893-1902.  | 1.2 | 58        |
| 68 | Nuclear magnetic resonance and fluorescence studies of substrate-induced conformational changes of histidine-binding protein J of Salmonella typhimurium. Biochemistry, 1977, 16, 1443-1451.  | 1.2 | 56        |
| 69 | Paramagnetic proton nuclear magnetic resonance shifts of metmyoglobin, methemoglobin, and hemin derivatives. Journal of the American Chemical Society, 1968, 90, 2700-2701.   | 6.6 | 55        |
| 70 | A New Approach to Reduce Toxicities and to Improve Bioavailabilities of Platinum-Containing Anti-Cancer Nanodrugs. Scientific Reports, 2015, 5, 10881.  | 1.6 | 55        |
| 71 | A Fatty Acid-Inspired Tetherable Initiator for Surface-Initiated Atom Transfer Radical Polymerization.<br>Chemistry of Materials, 2017, 29, 4963-4969.  | 3.2 | 55        |
| 72 | Magnetic field and temperature induced line broadening in the hyperfine-shifted proton resonances of myoglobin and hemoglobin. Journal of the American Chemical Society, 1977, 99, 1245-1250.                                       | 6.6 | 54        |

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|----|--|-----|-----------|
| 73 | Cationic lipid-mediated co-transfection of insect cells. Nucleic Acids Research, 1990, 18, 4033-4033.  | 6.5 | 54        |
| 74 | Restoring allosterism with compensatory mutations in hemoglobin. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 11547-11551.                         | 3.3 | 54        |
| 75 | Enhanced cellular uptake and long-term retention of chitosan-modified iron-oxide nanoparticles for MRI-based cell tracking. International Journal of Nanomedicine, 2012, 7, 4613.                | 3.3 | 53        |
| 76 | Nuclear Magnetic Resonance Studies Of Hemoglobin: Functional State Correlations And Isotopic Enrichment Strategie. CRC Critical Reviews in Biochemistry, 1975, 3, 221-287.                       | 2.0 | 52        |
| 77 | A Non-Invasive Approach to Detecting Organ Rejection by MRI: Monitoring the Accumulation of Immune Cells At the Transplanted Organ. Current Pharmaceutical Biotechnology, 2004, 5, 551-566.      | 0.9 | 51        |
| 78 | 31P NMR measurements of myocardial pH invivo. Biochemical and Biophysical Research Communications, 1988, 151, 70-77.   | 1.0 | 50        |
| 79 | Quaternary Structure Sensitive Tyrosine Interactions in Hemoglobin: A UV Resonance Raman Study of the Double Mutant rHb(β99Asp→Asn, α42Tyr→Asp)â€. Biochemistry, 1997, 36, 6197-6206.            | 1.2 | 50        |
| 80 | Ligand Binding Properties and Structural Studies of Recombinant and Chemically Modified Hemoglobins Altered at β93 Cysteineâ€. Biochemistry, 2002, 41, 11901-11913.                              | 1.2 | 50        |
| 81 | High-Resolution Cardiovascular MRI by Integrating Parallel Imaging With Low-Rank and Sparse<br>Modeling. IEEE Transactions on Biomedical Engineering, 2013, 60, 3083-3092.                       | 2.5 | 50        |
| 82 | A proton nuclear Overhauser effect investigation of the subunit interfaces in human normal adult hemoglobin. BBA - Proteins and Proteomics, 1987, 914, 40-48.                                    | 2.1 | 49        |
| 83 | A Novel Low Oxygen Affinity Recombinant Hemoglobin (α96Val→Trp): Switching Quaternary Structure Without Changing the Ligation State. Journal of Molecular Biology, 1995, 248, 867-882.           | 2.0 | 49        |
| 84 | Interactions of Bovine Caseins with Divalent Cations 1. Journal of the American Chemical Society, 1965, 87, 889-892.   | 6.6 | 47        |
| 85 | A novel approach with magnetic resonance imaging used for the detection of lung allograft rejection. Journal of Thoracic and Cardiovascular Surgery, 2000, 120, 923-934.                         | 0.4 | 47        |
| 86 | Membrane-bound D-lactate dehydrogenase from Escherichia coli: purification and properties. Biochemistry, 1979, 18, 312-316.  | 1.2 | 46        |
| 87 | Preparation and proton nuclear magnetic resonance investigation of cross-linked mixed valency hybrid hemoglobins: models for partially oxygenated species. Biochemistry, 1982, 21, 6280-6287.    | 1.2 | 46        |
| 88 | Nuclear Magnetic Resonance Studies of Haemoglobin M Milwaukee. Nature: New Biology, 1972, 237, 263-264.  | 4.5 | 45        |
| 89 | Proton nuclear magnetic resonance studies of hemoglobin M Milwaukee and their implications concerning the mechanism of cooperative oxygenation of hemoglobin. Biochemistry, 1977, 16, 1452-1462. | 1.2 | 45        |
| 90 | Magnetic Resonance Imaging Assessment of Macrophage Accumulation in Mouse Brain after Experimental Traumatic Brain Injury. Journal of Neurotrauma, 2009, 26, 1509-1519.                          | 1.7 | 45        |

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|-----|--|-----|-----------|
| 91  | Proton nuclear magnetic resonance and biochemical studies of oxygenation of human adult hemoglobin in deuterium oxide. Biochemistry, 1979, 18, 5238-5247.  | 1.2 | 44        |
| 92  | A New Nano-sized Iron Oxide Particle with High Sensitivity for Cellular Magnetic Resonance Imaging. Molecular Imaging and Biology, 2011, 13, 825-839.  | 1.3 | 44        |
| 93  | The Stabilization of Horse Ferrihemoglobin to Acid Denaturation by Combination with Ligands*. Biochemistry, 1963, 2, 256-266.  | 1.2 | 43        |
| 94  | Effects of Substitutions of Lysine and Aspartic Acid for Asparagine at $\hat{l}^2108$ and of Tryptophan for Valine at $\hat{l}\pm96$ on the Structural and Functional Properties of Human Normal Adult Hemoglobin: $\hat{a}\in\%$ Roles of $\hat{l}\pm1\hat{l}^21$ and $\hat{l}\pm1\hat{l}^22$ Subunit Interfaces in the Cooperative Oxygenation Process. Biochemistry, 1999, 38, 8751-8761. | 1.2 | 43        |
| 95  | A New Method for Preparing Mesenchymal Stem Cells and Labeling with Ferumoxytol for Cell Tracking by MRI. Scientific Reports, 2016, 6, 26271.  | 1.6 | 43        |
| 96  | Proton magnetic resonance study of high- and low-spin hemin derivatives. Biochemistry, 1971, 10, 2237-2246.  | 1.2 | 42        |
| 97  | [18]Proton nuclear magnetic resonance investigation of hemoglobins. Methods in Enzymology, 1981, 76, 275-312.  | 0.4 | 42        |
| 98  | NMR Investigation of the Dynamics of Tryptophan Side-chains in Hemoglobins. Journal of Molecular Biology, 2002, 321, 863-878.  | 2.0 | 42        |
| 99  | Hemoglobin Site-mutants Reveal Dynamical Role of Interhelical H-bonds in the Allosteric Pathway:<br>Time-resolved UV Resonance Raman Evidence for Intra-dimer Coupling. Journal of Molecular Biology,<br>2004, 340, 857-868.   | 2.0 | 41        |
| 100 | Nuclear magnetic resonance studies of hemoglobins. VIII. Evidence for preferential ligand binding to $\hat{l}^2$ chains within deoxyhemoglobins. Biochemical and Biophysical Research Communications, 1971, 45, 22-26.   | 1.0 | 40        |
| 101 | Fluorine-19 nuclear magnetic resonance study of 5-fluorotryptophan-labeled histidine-binding protein<br>J of Salmonella typhimurium. Journal of Molecular Biology, 1984, 179, 729-743.   | 2.0 | 40        |
| 102 | Roles of the .beta.146 histidyl residue in the molecular basis of the Bohr effect of hemoglobin: a proton nuclear magnetic resonance study. Biochemistry, 1991, 30, 1865-1877.   | 1.2 | 39        |
| 103 | Quaternary Structure of Carbonmonoxyhemoglobins in Solution: Structural Changes Induced by the Allosteric Effector Inositol Hexaphosphateâ€. Biochemistry, 2006, 45, 5140-5148.  | 1.2 | 39        |
| 104 | Spin-label study of energy-coupled active transport in Escherichia coli membrane vesicles. Biochemistry, 1974, 13, 5210-5214.  | 1.2 | 38        |
| 105 | Proton nuclear magnetic resonance studies of hemoglobins Osler ( $\hat{l}^2$ 145HC2 Tyr $\hat{a}^{\dagger}$ ' Asp) and McKees Rocks ( $\hat{l}^2$ 145HC2 Tyr $\hat{a}^{\dagger}$ 'Term): an assignment for an important tertiary structural probe in hemoglobin. Biochemistry, 1978, 17, 795-799.  | 1.2 | 38        |
| 106 | Mri Assessment of Cerebral Blood Flow after Experimental Traumatic Brain Injury Combined with Hemorrhagic Shock in Mice. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 129-136.   | 2.4 | 38        |
| 107 | Automated grading of renal cell carcinoma using whole slide imaging. Journal of Pathology Informatics, 2014, 5, 23.  | 0.8 | 38        |
| 108 | Site-specific incorporation of 5-fluorotryptophan as a probe of the structure and function of the membrane-bound D-lactate dehydrogenase of Escherichia coli: a fluorine-19 nuclear magnetic resonance study. Biochemistry, 1990, 29, 3256-3262.   | 1.2 | 37        |

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|-----|---|-----|-----------|
| 109 | Effects of Amino Acid Substitutions at β131 on the Structure and Properties of Hemoglobin:  Evidence for Communication between α1β1- and α1β2-Subunit Interfaces. Biochemistry, 2002, 41, 5644-5655.  | 1.2 | 37        |
| 110 | Dynamics of Allostery in Hemoglobin: Roles of the Penultimate Tyrosine H bonds. Journal of Molecular Biology, 2006, 356, 335-353.   | 2.0 | 37        |
| 111 | Quantitative Temporal Profiles of Penumbra and Infarction During Permanent Middle Cerebral Artery Occlusion in Rats. Translational Stroke Research, 2010, 1, 220-229.   | 2.3 | 36        |
| 112 | Magnetic Resonance Imaging Investigation of Macrophages in Acute Cardiac Allograft Rejection After Heart Transplantation. Circulation: Cardiovascular Imaging, 2013, 6, 965-973.  | 1.3 | 36        |
| 113 | A carbon-13 nuclear magnetic resonance investigation of the metabolic fluxes associated withy glucose metabolism in human erythrocytes. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1993, 1182, 162-178.  | 1.8 | 34        |
| 114 | Characterization of the Effects of Adenosine Receptor Agonists on Cerebral Blood Flow in Uninjured and Traumatically Injured Rat Brain using Continuous Arterial Spin-Labeled Magnetic Resonance Imaging. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, 1596-1612.             | 2.4 | 34        |
| 115 | Nuclear magnetic resonance studies of hemoglobins. Journal of Molecular Biology, 1969, 40, 311-313.   | 2.0 | 33        |
| 116 | Murine orthostatic response during prolonged vertical studies: Effect on cerebral blood flow measured by arterial spin-labeled MRI. Magnetic Resonance in Medicine, 2005, 54, 798-806.  | 1.9 | 33        |
| 117 | Proton nuclear magnetic resonance investigation of crosslinked asymmetrically modified hemoglobins: influence of the salt bridges on tertiary and quaternary structures of hemoglobin. Biochemistry, 1984, 23, 2492-2499.   | 1.2 | 32        |
| 118 | Real-time cardiac MRI without triggering, gating, or breath holding., 2008, 2008, 3381-4.   |     | 32        |
| 119 | Determination of the Solution-Bound Conformation of an Amino Acid Binding Protein by NMR Paramagnetic Relaxation Enhancement: Use of a Single Flexible Paramagnetic Probe with Improved Estimation of Its Sampling Space. Journal of the American Chemical Society, 2009, 131, 9532-9537. | 6.6 | 32        |
| 120 | Physical-chemical studies of phospholipids and poly(amino acids) interactions. Biochemistry, 1974, 13, 4375-4381.   | 1.2 | 31        |
| 121 | Assessment of roles of .beta.146-histidyl and other histidyl residues in the Bohr effect of human normal adult hemoglobin. Biochemistry, 1986, 25, 1706-1716.   | 1.2 | 31        |
| 122 | Membrane-bound d-lactate dehydrogenase of Escherichia coli: a model for protein interactions in membranes. BBA - Biomembranes, 1989, 988, 173-184.  | 7.9 | 31        |
| 123 | Novel Recombinant Hemoglobin, rHb (βN108Q), with Low Oxygen Affinity, High Cooperativity, and Stability against Autoxidationâ€. Biochemistry, 2000, 39, 13719-13729.  | 1.2 | 31        |
| 124 | The Polymerization of Bovine α -Casein B. Journal of Biological Chemistry, 1967, 242, 551-553.  | 1.6 | 31        |
| 125 | High-resolution proton nuclear magnetic resonance studies of sickle cell hemoglobin. Biochemistry, 1975, 14, 3424-3430.   | 1.2 | 30        |
| 126 | Recombinant Hemoglobin (α29Leucine → Phenylalanine, α96Valine → Tryptophan, β108Asparagine → Lysine) Exhibits Low Oxygen Affinity and High Cooperativity Combined with Resistance to Autoxidationâ€. Biochemistry, 1999, 38, 13433-13442.   | 1.2 | 30        |

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|-----|---|-----|-----------|
| 127 | Distal Ligand Reactivity and Quaternary Structure Studies of Proximally Detached Hemoglobins. Biochemistry, 2001, 40, 3780-3795.  | 1.2 | 30        |
| 128 | Sensitive and automated detection of iron-oxide-labeled cells using phase image cross-correlation analysis. Magnetic Resonance Imaging, 2008, 26, 618-628.  | 1.0 | 30        |
| 129 | Automated detection and characterization of SPIO″abeled cells and capsules using magnetic field perturbations. Magnetic Resonance in Medicine, 2012, 67, 278-289.   | 1.9 | 30        |
| 130 | Nuclear magnetic resonance and spin-label studies of hemoglobin Kempsey. Biochemistry, 1973, 12, 4212-4217.   | 1.2 | 29        |
| 131 | Roles of $\hat{l}\pm 114$ and $\hat{l}^287$ Amino Acid Residues in the Polymerization of Hemoglobin S: Implications for Gene Therapy. Journal of Molecular Biology, 1996, 263, 475-485.   | 2.0 | 29        |
| 132 | Novel Water-Mediated Hydrogen Bonds as the Structural Basis for the Low Oxygen Affinity of the Blood Substitute Candidate rHb(î±96Valâ†'Trp),. Biochemistry, 1998, 37, 9258-9265.   | 1.2 | 29        |
| 133 | Role of Interhelical H-Bonds ( $\hat{Wl}\pm 14\hat{a}^T\hat{l}\pm 67$ and $\hat{Wl}^2 15\hat{a}^T\hat{s}^2 72$ ) in the Hemoglobin Allosteric Reaction Path Evaluated by UV Resonance Raman Spectroscopy of Site-Mutants. Journal of the American Chemical Society, 1999, 121, 11197-11203. | 6.6 | 29        |
| 134 | A Comparative NMR Study of the Polypeptide Backbone Dynamics of Hemoglobin in the Deoxy and Carbonmonoxy Formsâ€. Biochemistry, 2007, 46, 6795-6803.  | 1.2 | 29        |
| 135 | A Biophysical Investigation of Recombinant Hemoglobins with Aromatic B10 Mutations in the Distal Heme Pocketsâ€,‡. Biochemistry, 2005, 44, 7207-7217.   | 1.2 | 28        |
| 136 | Effects of anions on the molecular basis of the Bohr effect of hemoglobin. Biophysical Chemistry, 1990, 37, 313-322.  | 1.5 | 27        |
| 137 | MRI of lungs using partial liquid ventilation with water-in-perfluorocarbon emulsions. Magnetic Resonance in Medicine, 2002, 48, 487-492.   | 1.9 | 27        |
| 138 | Effector-Induced Structural Fluctuation Regulates the Ligand Affinity of an Allosteric Protein: Binding of Inositol Hexaphosphate Has Distinct Dynamic Consequences for the T and R States of Hemoglobin. Biochemistry, 2008, 47, 4907-4915.  | 1.2 | 27        |
| 139 | Nuclear magnetic resonance studies of hemoglobin. IV. The structure-function relationship of human adult hemoglobins a and Chesapeake and its implication to the nature of oxygenation of hemoglobin. Biochemical and Biophysical Research Communications, 1970, 38, 779-786.               | 1.0 | 26        |
| 140 | Biochemical and biophysical studies on the interaction of a membrane-bound enzyme, D-lactate dehydrogenase from Escherichia coli, with phospholipids. Biochemistry, 1979, 18, 317-324.  | 1.2 | 26        |
| 141 | A General Strategy for the Assignment of Aliphatic Side-Chain Resonances of Uniformly 13C,15N-Labeled Large Proteins. Journal of the American Chemical Society, 2005, 127, 11920-11921.   | 6.6 | 26        |
| 142 | Insights into the Solution Structure of Human Deoxyhemoglobin in the Absence and Presence of an Allosteric Effector. Biochemistry, 2007, 46, 9973-9980.   | 1.2 | 26        |
| 143 | Effect of Inducible Nitric Oxide Synthase on Cerebral Blood Flow after Experimental Traumatic Brain Injury in Mice. Journal of Neurotrauma, 2008, 25, 299-310.  | 1.7 | 26        |
| 144 | Oxygen equilibrium studies of cross-linked asymmetrical cyanomet valency hybrid hemoglobins: models for partially oxygenated species. Biochemistry, 1987, 26, 2149-2155.  | 1.2 | 25        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Proton and phosphorus-31 nuclear magnetic resonance investigation of the interaction between 2,3-diphosphoglycerate and human normal adult hemoglobin. Biochemistry, 1990, 29, 3785-3792.   | 1.2 | 25        |
| 146 | WAXS Studies of the Structural Diversity of Hemoglobin in Solution. Journal of Molecular Biology, 2011, 408, 909-921.   | 2.0 | 25        |
| 147 | Phosphorus Nuclear Magnetic Resonance Study of Phosphoproteins. Journal of Biological Chemistry, 1966, 241, 3002-3007.  | 1.6 | 25        |
| 148 | Nuclear magnetic resonance studies of hemoglobins. V. The heme proton spectra of human deoxyhemoglobins A, F, Zürich, and Chesapeake. Biochemical and Biophysical Research Communications, 1970, 40, 343-349.   | 1.0 | 23        |
| 149 | Proton nuclear magnetic resonance studies on glutaminebinding protein from Escherichia coli.<br>Journal of Molecular Biology, 1989, 210, 849-857.   | 2.0 | 23        |
| 150 | Inactive and temperature-sensitive folding mutants generated by tryptophan substitutions in the membrane-bound D-lactate dehydrogenase of Escherichia coli. Biochemistry, 1991, 30, 10722-10729.  | 1.2 | 23        |
| 151 | Contributions of Asparagine at α97 to the Cooperative Oxygenation Process of Hemoglobinâ€.<br>Biochemistry, 1996, 35, 6620-6627.  | 1.2 | 23        |
| 152 | Real-time cardiac MRI using prior spatial-spectral information. , 2009, 2009, 4383-6.   |     | 23        |
| 153 | PMR studies of the substrate induced conformational change of glutamine binding protein from E. coli. Biochemical and Biophysical Research Communications, 1973, 53, 18-23.   | 1.0 | 22        |
| 154 | A proton nuclear magnetic resonance investigation of the anion Bohr effect of human normal adult hemoglobin. Biochemistry, 1989, 28, 5298-5306.   | 1.2 | 22        |
| 155 | Mapping stain distribution in pathology slides using whole slide imaging. Journal of Pathology Informatics, 2014, 5, 1.   | 0.8 | 22        |
| 156 | Combining perfluorocarbon and superparamagnetic ironâ€oxide cell labeling for improved and expanded applications of cellular MRI. Magnetic Resonance in Medicine, 2015, 73, 367-375.  | 1.9 | 22        |
| 157 | High-resolution proton nuclear magnetic resonance studies of histidine-binding proteins J of Salmonella typhimurium. An investigation of substrate and membrane interaction sites. Biochemistry, 1979, 18, 566-573.   | 1.2 | 21        |
| 158 | Polynitroxyl Albumin and Albumin Therapy after Pediatric Asphyxial Cardiac Arrest: Effects on Cerebral Blood Flow and Neurologic Outcome. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 560-569.   | 2.4 | 21        |
| 159 | A proton nuclear magnetic resonance investigation of human hemoglobin A2. BBA - Proteins and Proteomics, 1984, 785, 123-131.  | 2.1 | 20        |
| 160 | Measurement of fluxes through the pentose phosphate pathway in erythrocytes from individuals with sickle cell anemia by carbon-13 nuclear magnetic resonance spectroscopy. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1993, 1182, 179-188. | 1.8 | 20        |
| 161 | An Additional H-Bond in the α1β2Interface as the Structural Basis for the Low Oxygen Affinity and High<br>Cooperativity of a Novel Recombinant Hemoglobin (βL105W)â€. Biochemistry, 2000, 39, 13708-13718.  | 1.2 | 20        |
| 162 | MRI detection of tumor in mouse lung using partial liquid ventilation with a perfluorocarbon-in-water emulsion. Magnetic Resonance Imaging, 2004, 22, 645-652.  | 1.0 | 20        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | A New Approach to Deliver Anti-cancer Nanodrugs with Reduced Off-target Toxicities and Improved Efficiency by Temporarily Blunting the Reticuloendothelial System with Intralipid. Scientific Reports, 2017, 7, 16106.  | 1.6 | 20        |
| 164 | 31P-NMR spectroscopy of perifused rat hepatocytes immobilized in agarose threads: application to chemical-induced hepatotoxicity. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1992, 1139, 105-114.  | 1.8 | 19        |
| 165 | Structure and Self Assembly of a Retrovirus (FeLV) Proline Rich Neutralization Domain. Journal of Biomolecular Structure and Dynamics, 1994, 11, 821-836.   | 2.0 | 19        |
| 166 | Assessment of the effect of 2-chloroadenosine in normal rat brain using spin-labeled MRI measurement of perfusion. Magnetic Resonance in Medicine, 2001, 45, 924-929.   | 1.9 | 19        |
| 167 | Cerebral Blood Flow Changes after Brain Injury in Human Amyloid-Beta Knock-in Mice. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 826-833.   | 2.4 | 19        |
| 168 | 19F NMR Investigations of Membranes. Current Topics in Bioenergetics, 1985, , 53-95.  | 2.7 | 19        |
| 169 | Electron paramagnetic resonance studies of spin-labeled hemoglobins. II. Roles of subunit interactions and of intermediate structures in the cooperative oxygenation of hemoglobin and the results on hemoglobin Yakima, hemoglobin J Capetown, and carboxypeptidases A and B treated hemoglobin A. Biochemistry, 1970. 9, 4707-4713. | 1.2 | 18        |
| 170 | Light-scattering study of the effect of sodium chloride on the molecular weight of human adult hemoglobin. Biochemistry, 1971, 10, 3222-3229.   | 1.2 | 18        |
| 171 | Fluorine-19 NMR investigation of molecular motion and packing in sonicated phospholipid vesicles. Biochemistry, 1985, 24, 7153-7161.  | 1.2 | 18        |
| 172 | Molecular genetic, biochemical and nuclear magnetic resonance studies on the role of the tryptophan residues of glutamine-binding protein from Escherichia coli. Journal of Molecular Biology, 1989, 210, 859-867.  | 2.0 | 18        |
| 173 | Absence of pH changes during altered work in the in vivo sheep heart: A 31P-NMR investigation. Journal of Molecular and Cellular Cardiology, 1990, 22, 543-553.   | 0.9 | 18        |
| 174 | [8] Proton nuclear magnetic resonance studies of hemoglobin. Methods in Enzymology, 1994, 232, 97-139.  | 0.4 | 18        |
| 175 | Stable octameric structure of recombinant hemoglobin alpha2beta283 Gly->Cys. Protein Science, 2003, 12, 690-695.  | 3.1 | 18        |
| 176 | MRI Investigations of Graft Rejection Following Organ Transplantation Using Rodent Models. Methods in Enzymology, 2004, 386, 73-105.  | 0.4 | 18        |
| 177 | Cellular and Functional Imaging of Cardiac Transplant Rejection. Current Cardiovascular Imaging Reports, 2011, 4, 50-62.  | 0.4 | 18        |
| 178 | Tetramer-dimer equilibrium of carbon monoxyhemoglobin in 2M sodium chloride. Biochemistry, 1974, 13, 1683-1686.   | 1.2 | 17        |
| 179 | Nuclear magnetic resonance line-shape analysis of fluorine-19-labeled phospholipids. Biochemistry, 1982, 21, 6985-6989.   | 1.2 | 17        |
| 180 | A biochemical study of the reconstitution of d-lactate dehydrogenase-deficient membrane vesicles using fluorine-labeled components. Biochimica Et Biophysica Acta - Biomembranes, 1983, 729, 167-175.   | 1.4 | 17        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Fluorine-19 nuclear magnetic resonance investigation of fluorine-19-labeled phospholipids. 1. A multiple-pulse study. Biochemistry, 1984, 23, 6138-6141.   | 1.2 | 17        |
| 182 | A <sup>19</sup> Fâ€NMR study of the membraneâ€binding region of Dâ€lactate dehydrogenase of <i>escherichia coli</i> . Protein Science, 1993, 2, 1938-1947.   | 3.1 | 17        |
| 183 | Interfacial and Distal-Heme Pocket Mutations Exhibit Additive Effects on the Structure and Function of Hemoglobin. Biochemistry, 2008, 47, 10551-10563.  | 1.2 | 17        |
| 184 | Solution Structure and Dynamics of Human Hemoglobin in the Carbonmonoxy Form. Biochemistry, 2013, 52, 5809-5820.   | 1.2 | 17        |
| 185 | Activation of bovine carbonic anhydrase by ethlyenediamine tetraacetic acid. Biochemical and Biophysical Research Communications, 1960, 3, 20-23.  | 1.0 | 16        |
| 186 | Proton longitudinal relaxation investigation of histidyl residues of normal human adult and sickle deoxyhemoglobin: evidence for the existence of pregelation aggregates in sickle deoxyhemoglobin solutions Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 6577-6581. | 3.3 | 16        |
| 187 | A19F-NMR Study of the Equilibrium Unfolding of Membrane-Associatedd-Lactate Dehydrogenase ofEscherichia coliâ€. Biochemistry, 1996, 35, 16502-16509.   | 1.2 | 16        |
| 188 | Cardiac function of transplanted rat hearts using a working heart model assessed by magnetic resonance imaging. Journal of Heart and Lung Transplantation, 1999, 18, 1054-1064.  | 0.3 | 16        |
| 189 | Recombinant hemoglobin betaG83C-F41Y. An octameric protein. FEBS Journal, 2006, 273, 230-241.  | 2.2 | 16        |
| 190 | Molecular Aspects of the High Oxygen Afinity of Non-Hypertensive Hexa Pegylated Hemoglobin, [(SP-PEG5K)6-Hb]. Artificial Cells, Blood Substitutes, and Biotechnology, 2007, 35, 19-29.   | 0.9 | 16        |
| 191 | Proton nuclear magnetic resonance studies on hemoglobin malmo: implications of mutations at homologous positions of the $\hat{l}\pm$ and $\hat{l}^2$ chains. Biochemistry, 1976, 15, 1414-1420.  | 1.2 | 15        |
| 192 | Recombinant hemoglobins with low oxygen affinity and high cooperativity. Biophysical Chemistry, 2002, 98, 15-25.   | 1.5 | 15        |
| 193 | Autoxidation and Oxygen Binding Properties of Recombinant Hemoglobins with Substitutions at the $\hat{l}\pm Val$ -62 or $\hat{l}^2Val$ -67 Position of the Distal Heme Pocket. Journal of Biological Chemistry, 2013, 288, 25512-25521.  | 1.6 | 15        |
| 194 | Proton magnetic resonance studies of human adult hemoglobin in water. Biophysical Chemistry, 1974, 2, 49-52.   | 1.5 | 14        |
| 195 | [13] NMR of hemoproteins and iron-sulfur proteins. Methods in Enzymology, 1978, 54, 192-223.   | 0.4 | 14        |
| 196 | A proton nuclear magnetic resonance investigation of histidyl residues in sickle hemoglobin.<br>Biochemistry, 1982, 21, 5044-5051.   | 1.2 | 14        |
| 197 | Closed Form of Liganded Glutamine-Binding Protein by Rotational-Echo Double-Resonance NMR.<br>Biochemistry, 1997, 36, 9405-9408.   | 1.2 | 14        |
| 198 | Automatic Detection of Regional Heart Rejection in USPIO-Enhanced MRI. IEEE Transactions on Medical Imaging, 2008, 27, 1095-1106.  | 5.4 | 14        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | An Investigation of the Distal Histidyl Hydrogen Bonds in Oxyhemoglobin: Effects of Temperature, pH, and Inositol Hexaphosphate. Biochemistry, 2010, 49, 10606-10615.   | 1.2 | 14        |
| 200 | Improved Subspace Estimation for Low-Rank Model-Based Accelerated Cardiac Imaging. IEEE Transactions on Biomedical Engineering, 2014, 61, 2451-2457.  | 2.5 | 14        |
| 201 | Nuclear magnetic resonance studies of hemoglobin Chesapeake. $\hat{l}\pm1\hat{l}^22$ Mutant. Biochemistry, 1974, 13, 4772-4777.   | 1.2 | 13        |
| 202 | Interaction of the membrane-bound D-lactate dehydrogenase of Escherichia coli with phospholipid vesicles and reconstitution of activity using a spin-labeled fatty acid as an electron acceptor: a magnetic resonance and biochemical study. Biochemistry, 1991, 30, 3893-3898. | 1.2 | 13        |
| 203 | Multidimensional 1H and 15N NMR investigation of glutamine-binding protein of Escherichia coli. Journal of Biomolecular NMR, 1992, 2, 149-160.  | 1.6 | 13        |
| 204 | Crystals of Glutamine-binding Protein in Various Conformational States. Journal of Molecular Biology, 1994, 240, 87-91.   | 2.0 | 13        |
| 205 | Interspecies hybrid HbS: complete neutralization of val6( $\hat{l}^2$ )-dependent polymerization of human $\hat{l}^2$ -chain by pig $\hat{l}_2$ -chains11Edited by K. Nagai. Journal of Molecular Biology, 2000, 300, 1389-1406.  | 2.0 | 13        |
| 206 | High-resolution cardiac MRI using partially separable functions and weighted spatial smoothness regularization., 2010, 2010, 871-4.   |     | 13        |
| 207 | Magnetic and Spectral Properties of Carp Carbonmonoxyhemoglobin. Competitive Effects of Chloride lons and Inositol Hexakisphosphate. FEBS Journal, 1983, 132, 461-467.  | 0.2 | 12        |
| 208 | Fluorine-19 nuclear magnetic resonance investigation of fluorine-19-labeled phospholipids. 2. A line-shape analysis. Biochemistry, 1984, 23, 6142-6146.   | 1.2 | 12        |
| 209 | Molecular basis for the antisickling activity of aromatic amino acids and related compounds: a proton nuclear magnetic resonance investigation. Biochemistry, 1986, 25, 808-815.  | 1.2 | 12        |
| 210 | Improving spatiotemporal resolution of USPIO-enhanced dynamic imaging of rat kidneys. Magnetic Resonance Imaging, 2003, 21, 593-598.  | 1.0 | 12        |
| 211 | Orientation of Deoxyhemoglobin at High Magnetic Fields:  Structural Insights from RDCs in Solution.<br>Journal of the American Chemical Society, 2006, 128, 6290-6291.  | 6.6 | 12        |
| 212 | A Biochemical–Biophysical Study of Hemoglobins from Woolly Mammoth, Asian Elephant, and Humans. Biochemistry, 2011, 50, 7350-7360.  | 1.2 | 12        |
| 213 | An evaluation of the integrity of the blood-testis barrier by magnetic resonance imaging. Magnetic Resonance in Medicine, 1991, 22, 81-87.  | 1.9 | 11        |
| 214 | Assignment Strategies for 15N-1H Correlated Spectra of Large Proteins in Solution. Journal of Magnetic Resonance Series B, 1993, 102, 126-128.  | 1.6 | 11        |
| 215 | Proton nuclear magnetic resonance studies of hemoglobin providence ( $\hat{l}^2$ 82EF6 Lys $\hat{a}^{\dagger}$ ' Asn or Asp): a residue involved in anion binding. Biochemistry, 1978, 17, 791-795.   | 1.2 | 10        |
| 216 | A proton nuclear magnetic resonance investigation of histine-binding protein J of salmonella typhimurium: A model for transport of L-histidine across cytoplasmic membrane. Journal of Supramolecular Structure, 1980, 13, 131-145.   | 2.3 | 10        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Nuclear Magnetic Resonance, Biochemical, and Molecular Genetic Studies of the Membrane-Bound D-Lactate Dehydrogenase of Escherichia Coli. Biophysical Journal, 1986, 49, 113-115.   | 0.2 | 10        |
| 218 | 1H, 13C, and 15N NMR backbone assignments and chemical-shift-derived secondary structure of glutamine-binding protein of Escherichia coli. Journal of Biomolecular NMR, 1997, 9, 167-180.   | 1.6 | 10        |
| 219 | Side-chain assignments of methyl-containing residues in a uniformly 13C-labeled hemoglobin in the carbonmonoxy form. Journal of Biomolecular NMR, 2004, 30, 423-429.  | 1.6 | 10        |
| 220 | Subpixel registration in renal perfusion MR image sequence. , 0, , .  |     | 10        |
| 221 | Mesenchymal Stem Cell Preparation and Transfectionâ€free Ferumoxytol Labeling for MRI Cell Tracking. Current Protocols in Stem Cell Biology, 2017, 43, 2B.7.1-2B.7.14.  | 3.0 | 10        |
| 222 | Functional Non-Equivalence of $\hat{l}_{\pm}$ and $\hat{l}_{\pm}^2$ Hemes in Human Hemoglobins. Advances in Experimental Medicine and Biology, 1972, 28, 65-76.   | 0.8 | 10        |
| 223 | Correct assembly of human normal adult hemoglobin when expressed in transgenic swine: chemical, conformational and functional equivalence with the human-derived protein. Protein Engineering, Design and Selection, 1998, 11, 583-588. | 1.0 | 9         |
| 224 | Probing the conformation of hemoglobin presbyterian in the R-state. The Protein Journal, 2003, 22, 221-230.   | 1.1 | 9         |
| 225 | Letter to the Editor: Backbone Resonance Assignments of Human Adult Hemoglobin in the Carbonmonoxy Form. Journal of Biomolecular NMR, 2004, 28, 203-204.  | 1.6 | 9         |
| 226 | Improve myocardial T <sub>1</sub> measurement in rats with a new regression model: Application to myocardial infarction and beyond. Magnetic Resonance in Medicine, 2014, 72, 737-748.  | 1.9 | 9         |
| 227 | Four-dimensional MR cardiovascular imaging: Method and applications., 2011, 2011, 3732-5.   |     | 8         |
| 228 | Structures of haemoglobin from woolly mammoth in liganded and unliganded states. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 1441-1449.   | 2.5 | 8         |
| 229 | A high-resolution proton nuclear-magnetic-resonance investigation of carp hemoglobin.<br>Conformational differences between carp and human normal adult hemoglobins in solution. FEBS<br>Journal, 1984, 141, 255-259.                   | 0.2 | 7         |
| 230 | Bloch analysis and solvent suppression by soft pulses. Application to Proton NMR investigations of human hemoglobin in H2O and in intact red blood cells. Journal of Magnetic Resonance, 1986, 66, 43-57.                               | 0.5 | 7         |
| 231 | Effects of cholesterol or gramicidin on slow and fast motions of phospholipids in oriented bilayers Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 8758-8762.                               | 3.3 | 7         |
| 232 | Effect of cyclosporine on hepatic energy status and on fructose metabolism after portacaval shunt in dog as monitored by phosphorus-31 nuclear magnetic resonance spectroscopyin vivo. Hepatology, 1991, 13, 780-785.                   | 3.6 | 7         |
| 233 | Probing the Importance of the Amino-Terminal Sequence of the $\hat{I}^2$ - and $\hat{I}^3$ -Chains to the Properties of Normal Adult and Fetal Hemoglobins $\hat{a} \in \hat{I}$ . Biochemistry, 2001, 40, 12169-12177.                 | 1.2 | 7         |
| 234 | Nuclear Magnetic Resonance Spectroscopy in the Study of Hemoglobin Cooperativity. Methods in Enzymology, 2004, 379, 28-54.  | 0.4 | 7         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 235 | Backbone Resonance Assignment of Human Adult Hemoglobin in the Eeoxy Form. Journal of Biomolecular NMR, 2006, 36, 1-1.  | 1.6 | 7         |
| 236 | Enduring disturbances in regional cerebral blood flow and brain oxygenation at 24 h after asphyxial cardiac arrest in developing rats. Pediatric Research, 2017, 81, 94-98.   | 1.1 | 7         |
| 237 | Effect of ethanol on energy status and intracellular calcium of Sertoli cells: a study using immobilized perfused cells. Endocrinology, 1993, 133, 2749-2755.   | 1.4 | 7         |
| 238 | Reconstitution of D-Lactate Dehydrogenase-Deficient Membrane Vesicles using Fluorine-labeled Components. Biophysical Journal, 1982, 37, 101-103.  | 0.2 | 6         |
| 239 | A high-resolution 1H-NMR investigation of the histidine-binding protein J of Salmonella Typhimurium. Biophysical Chemistry, 1984, 19, 279-287.  | 1.5 | 6         |
| 240 | Phosphorus-31-NMR and calorimetric studies of the low-temperature behavior of three fluorine-19-labeled dimyristoylphosphatidylcholines. The Journal of Physical Chemistry, 1993, 97, 2946-2951.                                | 2.9 | 6         |
| 241 | Site mutations disrupt inter-helical H-bonds (α14W–α67T and β15W–β72S) involved in kinetic steps in the hemoglobin R→T transition without altering the free energies of oxygenation. Biophysical Chemistry, 2002, 100, 131-142. | 1.5 | 6         |
| 242 | Role of $\hat{l}^2/\hat{l}$ 101Gln in Regulating the Effect of Temperature and Allosteric Effectors on Oxygen Affinity in Woolly Mammoth Hemoglobin. Biochemistry, 2013, 52, 8888-8897.   | 1.2 | 6         |
| 243 | Cardiac Arrest Disrupts Caspase-1 and Patterns of Inflammatory Mediators Differently in Skin and Muscle Following Localized Tissue Injury in Rats: Insights from Data-Driven Modeling. Frontiers in Immunology, 2015, 6, 587.   | 2.2 | 6         |
| 244 | Sickle Cell Hemoglobin with Mutation at $\hat{l}\pm His-50$ Has Improved Solubility. Journal of Biological Chemistry, 2015, 290, 21762-21772.   | 1.6 | 6         |
| 245 | Modulation of hemoglobin dynamics by an allosteric effector. Protein Science, 2017, 26, 505-514.  | 3.1 | 6         |
| 246 | Impacts of Intralipid on Nanodrug Abraxane Therapy and on the Innate Immune System. Scientific Reports, 2020, 10, 2838.   | 1.6 | 6         |
| 247 | Formation of intermolecular and intramolecular hydrogen bonds in histidine-binding protein J of Salmonella typhimurium upon binding l-histidine. Journal of Molecular Biology, 1989, 208, 477-489.                              | 2.0 | 5         |
| 248 | High-level production of human $\hat{l}_{\pm}$ - and $\hat{l}_{\pm}$ -globins in insect cells. Protein Expression and Purification, 1992, 3, 134-141.   | 0.6 | 5         |
| 249 | A Biochemical and Biophysical Characterization of Recombinant Mutants of Fetal Hemoglobin and Their Interaction with Sickle Cell Hemoglobinâ€,‡. Biochemistry, 1999, 38, 9549-9555.   | 1.2 | 5         |
| 250 | Modification of globin gene expression by RNA targeting strategies. Experimental Hematology, 2007, 35, 1209-1218.   | 0.2 | 5         |
| 251 | Perfusion MRI Assessment of Cerebral Blood Flow and CO2 Reactivity after Controlled Cortical Impact in Rats. Advances in Experimental Medicine and Biology, 1997, 411, 7-12.  | 0.8 | 5         |
| 252 | Interaction of haptoglobin with hemoglobin octamers based on the mutation & mathematical amp; amp; amp; amp; amp; amp; amp; amp;  | 0.1 | 5         |

| #   | Article   | lF  | Citations |
|-----|---|-----|-----------|
| 253 | Phosphorus-31 nuclear magnetic resonance investigation of membrane vesicles from Escherichia coli. Biochemistry, 1983, 22, 6130-6134.   | 1.2 | 4         |
| 254 | An exact evaluation of nuclear spin-lattice relaxation for a two-site jump model. Journal of Magnetic Resonance, 1989, 82, 318-336.   | 0.5 | 4         |
| 255 | Design of Pulse Sequences for Solvent Suppression and Uniform Excitation. Application to Observing Hemoglobin in Solution and Inside Red Blood Cells. Journal of Magnetic Resonance Series B, 1993, 101, 17-27.   | 1.6 | 4         |
| 256 | Response of normal and reperfused livers to glucagon stimulation: NMR detection of blood flow and high-energy phosphates. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1993, 1181, 7-14.   | 1.8 | 4         |
| 257 | Nature and environment of the sulfhydryls of membrane-associated d-lactate dehydrogenase of Escherichia coli. BBA - Proteins and Proteomics, 1995, 1252, 278-283.   | 2.1 | 4         |
| 258 | Multi-ribozyme Targeting of Human α-Globin Gene Expression. Blood Cells, Molecules, and Diseases, 1999, 25, 361-373.  | 0.6 | 4         |
| 259 | Cardiac MR image segmentation: quality assessment of STACS. , 0, , .  |     | 4         |
| 260 | Hemoglobin Einstein: Semisynthetic deletion in the B-helix of the $\hat{l}_{\pm}$ -chain. Protein Science, 2004, 13, 1266-1275.   | 3.1 | 4         |
| 261 | Mapping Protein-Protein Interfaces on the Basis of Proton Density Difference. Angewandte Chemie - International Edition, 2005, 44, 5141-5144.   | 7.2 | 4         |
| 262 | Enhanced Inhibition of Polymerization of Sickle Cell Hemoglobin in the Presence of Recombinant Mutants of Human Fetal Hemoglobin with Substitutions at Position 43 in the $\hat{I}^3$ -Chain. Biochemistry, 2005, 44, 12188-12195.  | 1,2 | 4         |
| 263 | Immune Cells Detection of the In Vivo Rejecting Heart in USPIO-Enhanced Magnetic Resonance Imaging. , 2006, 2006, 942-5.  |     | 4         |
| 264 | First-pass perfusion cardiac MRI using the Partially Separable Functions model with generalized support., 2010, 2010, 2833-6.   |     | 4         |
| 265 | by research grants from the National Institutes of Health (HL-10383). The NMR Facility in Pittsburgh is supported by a grant from the National Institutes of Health (RR-00292) and that at the Stanford Magnetic Resonance Laboratory by grants from the National Institutes of Health (RR-00711) and the |     | 4         |
| 266 | Tertiary structure variability within the quaternary states of hemoglobin: a spin label study. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1978, 535, 193-205.   | 1.7 | 3         |
| 267 | Cyclosporine and liver regeneration studied byin vivo 31P nuclear magnetic resonance spectroscopy. Digestive Diseases and Sciences, 1991, 36, 687-692.  | 1.1 | 3         |
| 268 | Stopped-flow kinetic and biophysical studies of membrane-associated d-lactate dehydrogenase of Escherichia coli. BBA - Proteins and Proteomics, 1995, 1252, 269-277.  | 2.1 | 3         |
| 269 | Recombinant Hemoglobins with Low Oxygen Affinity and High Cooperativity., 1998,, 281-296.   |     | 3         |
| 270 | Characterization of Early Indicators of Cardiac Allograft Vasculopathy Lesions in a Rat Model Using Non-Invasive Cellular MR. OBM Transplantation, 2019, 3, 1-1.  | 0.2 | 3         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 271 | Biochemical and morphological properties of membranes of unsaturated fatty acid auxotrophs of Salmonella typhimurium: effects of fluorinated myristic acids. Biochimica Et Biophysica Acta - Biomembranes, 1986, 862, 413-428. | 1.4 | 2         |
| 272 | Preliminary crystallographic analysis of glutamine-binding protein from Escherichia coli. Journal of Molecular Biology, 1989, 205, 459-460.  | 2.0 | 2         |
| 273 | Effects of chemical exchange and dipole-dipole interactions on the proton relaxation rates of surface histidyl residues in human hemoglobins. Journal of Magnetic Resonance, 1990, 88, 42-59.                                  | 0.5 | 2         |
| 274 | An open transversez-gradient coil design for magnetic resonance imaging. Review of Scientific Instruments, 2002, 73, 2208-2210.  | 0.6 | 2         |
| 275 | Nuclear Magnetic Resonance of Hemoglobins. , 2003, 82, 251-269.  |     | 2         |
| 276 | Reconstruction of 3D dense cardiac motion from tagged MR sequences. , 0, , .   |     | 2         |
| 277 | EFFECT OF HEMORRHAGIC SHOCK ON CEREBRAL BLOOD FLOW IN EXPERIMENTAL TRAUMATIC BRAIN INJURY: MAGNETIC RESONANCE IMAGING ASSESSMENT Critical Care Medicine, 2006, 34, A5.   | 0.4 | 2         |
| 278 | Early Detection of Rejection in Cardiac MRI: A Spectral Graph Approach., 0, , .  |     | 2         |
| 279 | A New Approach to Decrease the RES Uptake of Nanodrugs by Pre-administration with Intralipid® Resulting in a Reduction of Toxic Side Effects. Fundamental Biomedical Technologies, 2016, , 125-146.                            | 0.2 | 2         |
| 280 | Longitudinal-spin-order filtered STEAM for the detection of X nuclei by volume-localized 1H nmr spectroscopy. Journal of Magnetic Resonance, 1991, 95, 581-584.  | 0.5 | 1         |
| 281 | Lactate Mapping with Full Sensitivity by Spin-Filtered NMR Imaging. Journal of Magnetic Resonance<br>Series B, 1994, 103, 120-127.   | 1.6 | 1         |
| 282 | A data-driven approach to prior extraction for segmentation of left ventricle in cardiac MR images. , 2009, 2009, 831-834.   |     | 1         |
| 283 | Auto-Oxidation of Human Hemoglobin and the Roles of Distal Heme Pocket Substitutions. Biophysical Journal, 2009, 96, 558a.   | 0.2 | 1         |
| 284 | Mapping immune cells infiltration using restricted diffusion MRI. , 2014, , .  |     | 1         |
| 285 | Self-navigated low-rank MRI for MPIO-labeled immune cell imaging of the heart., 2014, 2014, 1529-32.   |     | 1         |
| 286 | A 1H Nmr Investigation of the Role of Histidyl Residues in the Alkaline Bohr Effect of Normal Human Adult Hemoglobin., 1982,, 249-256.   |     | 1         |
| 287 | High-level production of human $\hat{l}_{z}$ -and $\hat{l}_{z}$ -globins in insect cells. Protein Expression and Purification, 1992, 3, 134-141.   | 0.6 | 1         |
| 288 | Recombinant Octameric Hemoglobins as Resuscitation Fluids in a Murine Model of Traumatic Brain Injury Plus Hemorrhagic Shock., 2013,, 249-272.   |     | 1         |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 289 | Nuclear Magnetic Resonance Studies of Hemoglobins. , 1971, , 280-287.   |     | 0         |
| 290 | Physical Studies of Human Adult Hemoglobins A and Chesapeake and Their Implication to the Nature of Oxygenation of Hemoglobin., 1971,, 238-248.   |     | 0         |
| 291 | NMR and Molecular Genetics as Tools for Investigating Protein Interactions in Membrane Systems.<br>Journal of the Chinese Chemical Society, 1990, 37, 125-134.  | 0.8 | 0         |
| 292 | An approach to lactate mapping by spin-filtered 2D FT MR imaging. Journal of Magnetic Resonance, 1992, 96, 631-634.   | 0.5 | 0         |
| 293 | The Structure—Function Relationship of Hemoglobin in Solution at Atomic Resolution. ChemInform, 2004, 35, no.   | 0.1 | 0         |
| 294 | MAGNETIC RESONANCE IMAGING ASSESSMENT OF MACROPHAGE ACCUMULATION IN MOUSE BRAIN AFTER EXPERIMENTAL TRAUMATIC BRAIN INJURY: A PRELIMINARY REPORT Critical Care Medicine, 2006, 34, A6.   | 0.4 | 0         |
| 295 | Diffusion Map Approach to Classifying Early Stage Cardiac Dysfunction. , 2007, , .  |     | 0         |
| 296 | Real-time free-breathing strategy for tracking labeled cells with in-vivo vardiac MRI. Journal of Cardiovascular Magnetic Resonance, 2009, $11,\ldots$  | 1.6 | 0         |
| 297 | Non-invasive monitoring allograft rejection by simultaneous cellular and functional cardiac MRI.<br>Journal of Cardiovascular Magnetic Resonance, 2009, 11, .   | 1.6 | 0         |
| 298 | A Biophysical-Biochemical Comparison of Hemoglobins from Mammoth, Asian Elephant, and Human. Biophysical Journal, 2010, 98, 638a-639a.  | 0.2 | 0         |
| 299 | The impact of physiological loading on immune cell infiltration and myocardial function evaluated by cardiac MRI: a comparison between non-working heart and working heart transplant models. Journal of Cardiovascular Magnetic Resonance, 2012, 14, . | 1.6 | 0         |
| 300 | Roles of Amino Acid Residues in Woolly Mammoth Hemoglobin on the Temperature Effect of Oxygen Binding. Biophysical Journal, 2013, 104, 559a.  | 0.2 | 0         |