

# David P Cistola

## List of Publications by Year in descending order

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81  
papers

3,617  
citations

147726

31  
h-index

133188

59  
g-index

81  
all docs

81  
docs citations

81  
times ranked

2842  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Ionization and phase behavior of fatty acids in water: application of the Gibbs phase rule. <i>Biochemistry</i> , 1988, 27, 1881-1888.   | 1.2 | 421       |
| 2  | Ligand Binding Alters the Backbone Mobility of Intestinal Fatty Acid-Binding Protein as Monitored by $^{15}\text{N}$ NMR Relaxation and $^1\text{H}$ Exchange. <i>Biochemistry</i> , 1997, 36, 2278-2290.  | 1.2 | 209       |
| 3  | Phase behavior and bilayer properties of fatty acids: hydrated 1:1 acid-soaps. <i>Biochemistry</i> , 1986, 25, 2804-2812.  | 1.2 | 195       |
| 4  | Discrete Backbone Disorder in the Nuclear Magnetic Resonance Structure of Apo Intestinal Fatty Acid-Binding Protein: Implications for the Mechanism of Ligand Entry. <i>Biochemistry</i> , 1997, 36, 1450-1460.  | 1.2 | 170       |
| 5  | The NMR Solution Structure of Intestinal Fatty Acid-binding Protein Complexed with Palmitate: Application of a Novel Distance Geometry Algorithm. <i>Journal of Molecular Biology</i> , 1996, 264, 585-602.  | 2.0 | 159       |
| 6  | Association Between Obesity and Cardiovascular Outcomes: Updated Evidence from Meta-analysis Studies. <i>Current Cardiology Reports</i> , 2020, 22, 25.  | 1.3 | 142       |
| 7  | Human Phagocytes Employ the Myeloperoxidase-Hydrogen Peroxide System to Synthesize Dityrosine, Trityrosine, Pulcherosine, and Isodityrosine by a Tyrosyl Radical-dependent Pathway. <i>Journal of Biological Chemistry</i> , 1996, 271, 19950-19956.       | 1.6 | 126       |
| 8  | The helical domain of intestinal fatty acid binding protein is critical for collisional transfer of fatty acids to phospholipid membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 12174-12178. | 3.3 | 126       |
| 9  | Transfer of oleic acid between albumin and phospholipid vesicles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1986, 83, 82-86.  | 3.3 | 125       |
| 10 | Ligand-protein electrostatic interactions govern the specificity of retinol- and fatty acid-binding proteins. <i>Biochemistry</i> , 1993, 32, 872-878.   | 1.2 | 107       |
| 11 | Cytoplasmic fatty acid binding protein: Significance for intracellular transport of fatty acids and putative role on signal transduction pathways. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 1993, 48, 33-41.                         | 1.0 | 107       |
| 12 | Fatty Acid Interactions with a Helix-less Variant of Intestinal Fatty Acid-Binding Protein. <i>Biochemistry</i> , 1996, 35, 7559-7565.   | 1.2 | 97        |
| 13 | Interactions of oleic acid with liver fatty acid binding protein: a carbon-13 NMR study. <i>Biochemistry</i> , 1988, 27, 711-717.  | 1.2 | 92        |
| 14 | The Ionization Behavior of Fatty Acids and Bile Acids in Micelles and Membranes. <i>Hepatology</i> , 1984, 4, 77S-79S.   | 3.6 | 90        |
| 15 | Energetics by NMR: Site-specific binding in a positively cooperative system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 1847-1852.   | 3.3 | 86        |
| 16 | Fatty acid distribution in systems modeling the normal and diabetic human circulation. A $^{13}\text{C}$ nuclear magnetic resonance study. <i>Journal of Clinical Investigation</i> , 1991, 87, 1431-1441.   | 3.9 | 86        |
| 17 | Interactions of myristic acid with bovine serum albumin: a $^{13}\text{C}$ NMR study. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1984, 81, 3718-3722.  | 3.3 | 84        |
| 18 | Titration calorimetry as a binding assay for lipid-binding proteins. <i>Molecular and Cellular Biochemistry</i> , 1993, 123, 29-37.  | 1.4 | 75        |

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|----|--|-----|-----------|
| 19 | Intestinal Fatty Acid-Binding Protein: The Structure and Stability of a Helix-less Variant. <i>Biochemistry</i> , 1996, 35, 7553-7558.   | 1.2 | 62        |
| 20 | Fatty acid binding proteins reduce 15-lipoxygenase-induced oxygenation of linoleic acid and arachidonic acid. <i>Lipids and Lipid Metabolism</i> , 1997, 1346, 75-85.  | 2.6 | 60        |
| 21 | Determinants of Cooperativity and Site Selectivity in Human Ileal Bile Acid Binding Protein. <i>Biochemistry</i> , 2006, 45, 727-737.  | 1.2 | 51        |
| 22 | A Single Hydroxyl Group Governs Ligand Site Selectivity in Human Ileal Bile Acid Binding Protein. <i>Journal of the American Chemical Society</i> , 2004, 126, 11024-11029.  | 6.6 | 50        |
| 23 | The structure and dynamics of rat apo-cellular retinol-binding protein II in solution: comparison with the X-ray structure 1 Edited by P. E. Wright. <i>Journal of Molecular Biology</i> , 1999, 286, 1179-1195.   | 2.0 | 46        |
| 24 | Binding of retinol induces changes in rat cellular retinol-binding protein II conformation and backbone dynamics. <i>Journal of Molecular Biology</i> , 2000, 300, 619-632.  | 2.0 | 44        |
| 25 | Relative Strength of Cation- $\pi$ vs Salt-Bridge Interactions: The Gt $\pm$ (340 $\sim$ 350) Peptide/Rhodopsin System. <i>Journal of the American Chemical Society</i> , 2006, 128, 7531-7541.  | 6.6 | 42        |
| 26 | Compact NMR relaxometry of human blood and blood components. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 83, 53-64.   | 5.8 | 42        |
| 27 | Deletion of the Helical Motif in the Intestinal Fatty Acid-Binding Protein Reduces Its Interactions with Membrane Monolayers: Brewster Angle Microscopy, IR Reflection-Absorption Spectroscopy, and Surface Pressure Studies. <i>Biochemistry</i> , 2001, 40, 1976-1983. | 1.2 | 41        |
| 28 | Steroid Ring Hydroxylation Patterns Govern Cooperativity in Human Bile Acid Binding Protein. <i>Biochemistry</i> , 2003, 42, 11561-11567.  | 1.2 | 41        |
| 29 | Analysis of Ligand Binding and Protein Dynamics of Human Retinoid X Receptor Alpha Ligand-Binding Domain by Nuclear Magnetic Resonance. <i>Biochemistry</i> , 2006, 45, 1629-1639.   | 1.2 | 38        |
| 30 | Non-Invasive Glucose Monitoring Using Optical Sensor and Machine Learning Techniques for Diabetes Applications. <i>IEEE Access</i> , 2021, 9, 73029-73045.   | 2.6 | 36        |
| 31 | High-resolution NMR in inhomogeneous fields. <i>Chemical Physics Letters</i> , 1997, 277, 367-374.   | 1.2 | 31        |
| 32 | Two Homologous Rat Cellular Retinol-binding Proteins Differ in Local Conformational Flexibility. <i>Journal of Molecular Biology</i> , 2003, 330, 799-812.   | 2.0 | 31        |
| 33 | The three-dimensional structure of a helix-less variant of intestinal fatty acid-binding protein. <i>Protein Science</i> , 1998, 7, 1332-1339.   | 3.1 | 30        |
| 34 | Localization of Tolbutamide Binding Sites on Human Serum Albumin Using Titration Calorimetry and Heteronuclear 2-D NMR. <i>Biochemistry</i> , 1995, 34, 8780-8787.   | 1.2 | 29        |
| 35 | Intestinal fatty acid binding protein: folding of fluorescein-modified proteins. <i>Biochemistry</i> , 1995, 34, 2724-2730.  | 1.2 | 28        |
| 36 | NMR structure of a fungal virulence factor reveals structural homology with mammalian saposin B. <i>Molecular Microbiology</i> , 2009, 72, 344-353.  | 1.2 | 28        |

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|----|---|-----|-----------|
| 37 | A comparative study of the conformational properties of Escherichia coli-derived rat intestinal and liver fatty acid binding proteins. <i>BBA - Proteins and Proteomics</i> , 1993, 1162, 291-296.  | 2.1 | 26        |
| 38 | An embryo-associated fatty acid-binding protein in the filarial nematode <i>Brugia malayi</i> . <i>Molecular and Biochemical Parasitology</i> , 2002, 124, 1-10.  | 0.5 | 22        |
| 39 | Water T2 as an early, global and practical biomarker for metabolic syndrome: an observational cross-sectional study. <i>Journal of Translational Medicine</i> , 2017, 15, 258.  | 1.8 | 22        |
| 40 | <sup>13</sup> C NMR studies of fatty acid-protein interactions: comparison of homologous fatty acid-binding proteins produced in the intestinal epithelium. <i>Molecular and Cellular Biochemistry</i> , 1990, 98, 101-10.                  | 1.4 | 21        |
| 41 | Intracellular fatty-acid-binding proteins and their genes: useful models for diverse biological questions. <i>Current Opinion in Lipidology</i> , 1991, 2, 125-137.   | 1.2 | 21        |
| 42 | Kinetic Mechanism of Ligand Binding in Human Ileal Bile Acid Binding Protein as Determined by Stopped-Flow Fluorescence Analysis. <i>Biochemistry</i> , 2007, 46, 5427-5436.  | 1.2 | 21        |
| 43 | Novel functions of CCM1 delimit the relationship of PTB/PH domains. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1274-1286.   | 1.1 | 21        |
| 44 | <sup>1</sup> H, <sup>13</sup> C and <sup>15</sup> N assignments and chemical shift-derived secondary structure of intestinal fatty acid-binding protein. <i>Journal of Biomolecular NMR</i> , 1995, 6, 198-210.                             | 1.6 | 20        |
| 45 | Synthesis of [3,4- <sup>13</sup> C <sub>2</sub> ]-Enriched Bile Salts as NMR Probes of Protein-Ligand Interactions. <i>Journal of Organic Chemistry</i> , 2002, 67, 6764-6771.  | 1.7 | 20        |
| 46 | Nanofluidity of Fatty Acid Hydrocarbon Chains As Monitored by Benchtop Time-Domain Nuclear Magnetic Resonance. <i>Biochemistry</i> , 2014, 53, 7515-7522.   | 1.2 | 20        |
| 47 | Probing internal water molecules in proteins using two-dimensional <sup>19</sup> F- <sup>1</sup> H NMR. <i>Journal of Biomolecular NMR</i> , 1995, 5, 415-9.  | 1.6 | 19        |
| 48 | Measurement of methyl <sup>13</sup> C- <sup>1</sup> H cross-correlation in uniformly <sup>13</sup> C-, <sup>15</sup> N-, labeled proteins. <i>Journal of Biomolecular NMR</i> , 2003, 27, 351-364.  | 1.6 | 18        |
| 49 | Structural Features Responsible for the Biological Stability of <i>Histoplasma</i> 's Virulence Factor CBP. <i>Biochemistry</i> , 2008, 47, 4427-4438.  | 1.2 | 16        |
| 50 | Structural determinants of ligand binding in the ternary complex of human ileal bile acid binding protein with glycocholate and glycochenodeoxycholate obtained from solution <sup>1</sup> H NMR. <i>FEBS Journal</i> , 2016, 283, 541-555. | 2.2 | 16        |
| 51 | Micelle formation and phase separation. <i>Journal of the American Chemical Society</i> , 1990, 112, 3214-3215.   | 6.6 | 15        |
| 52 | Fat sites found!. <i>Nature Structural Biology</i> , 1998, 5, 751-753.  | 9.7 | 14        |
| 53 | Titration calorimetry as a binding assay for lipid-binding proteins. , 1993, , 29-37.   |     | 13        |
| 54 | Aptamer-based search for correlates of plasma and serum water T2: implications for early metabolic dysregulation and metabolic syndrome. <i>Biomarker Research</i> , 2018, 6, 28.   | 2.8 | 12        |

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|----|--|-----|-----------|
| 55 | A Simple Efficient Synthesis of [23,24]-13C2-Labeled Bile Salts as NMR Probes of Protein-Ligand Interactions. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2002, 12, 433-435.                                   | 1.0 | 11        |
| 56 | The NMR structure of a stable and compact all- $\beta$ -sheet variant of intestinal fatty acid-binding protein. <i>Protein Science</i> , 2004, 13, 1227-1237.  | 3.1 | 11        |
| 57 | Alternate Binding Mode of C-terminal Phenethylamine Analogs of Gt(340-350) to Photoactivated Rhodopsin. <i>Chemical Biology and Drug Design</i> , 2006, 68, 295-307.   | 1.5 | 9         |
| 58 | The RXR C-terminus T462 is a NMR sensor for coactivator peptide binding. <i>Biochemical and Biophysical Research Communications</i> , 2008, 366, 932-937.  | 1.0 | 6         |
| 59 | Early detection of metabolic dysregulation using water T <sub>2</sub> analysis of biobanked samples. <i>Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy</i> , 2018, Volume 11, 807-818.                  | 1.1 | 6         |
| 60 | Interactions of oleic acid with liver fatty acid binding protein: a carbon-13 NMR study [Erratum to document cited in CA108(7):51580v]. <i>Biochemistry</i> , 1989, 28, 3628-3628.                                     | 1.2 | 3         |
| 61 | Dynamics Light Scattering as a Tool for Assessing Health Status and Disease Risk. <i>Biophysical Journal</i> , 2016, 110, 476a.  | 0.2 | 3         |
| 62 | A Faster Migrating Variant Masquerades as NICD When Performing in Vitro $\beta$ -Secretase Assays with Bacterially Expressed Notch Substrates. <i>Biochemistry</i> , 2006, 45, 5351-5358.                              | 1.2 | 2         |
| 63 | 1000-P: Plasma Water T2 Monitors Cardiometabolic Health and Improves with Lifestyle Modification. <i>Diabetes</i> , 2021, 70, .  | 0.3 | 1         |
| 64 | Compensatory Hyperinsulinemia is a Hidden Risk Factor for Type 2 Diabetes: CARDIA 30-year Follow Up. <i>Metabolism: Clinical and Experimental</i> , 2022, 128, 155061.   | 1.5 | 1         |
| 65 | Compensatory Hyperinsulinemia in Young Adults and the Risk of Future Diabetes: CARDIA 25-year Follow Up. <i>Metabolism: Clinical and Experimental</i> , 2020, 104, 154131.   | 1.5 | 0         |
| 66 | Correlates and Risk Factors for Compensatory Hyperinsulinemia in U.S. Populations. <i>Metabolism: Clinical and Experimental</i> , 2020, 104, 154132.   | 1.5 | 0         |
| 67 | 13C NMR studies of fatty acid-protein interactions: comparison of homologous fatty acid-binding proteins produced in the intestinal epithelium. , 1990, , 101-110.   |     | 0         |
| 68 | STOPPED-FLOW CIRCULAR DICHROISM AND 19F NMR AS PROBES FOR THE FOLDING OF RAT INTESTINAL FATTY-ACID BINDING PROTEIN (IFABP)11Supported by NIH research grants DK13332 to C.F. and DK30292 to J.I.G.. , 1992, , 437-443. |     | 0         |
| 69 | Abstract P041: New Biomarkers for Detecting and Subtyping Insulin Resistance. <i>Circulation</i> , 2017, 135, .  | 1.6 | 0         |
| 70 | Metabolic Syndrome and Prediabetes Fail to Detect a High Prevalence of Early Insulin Resistanceâ€”The PREMIER Study. <i>Diabetes</i> , 2018, 67, 1534-P.   | 0.3 | 0         |
| 71 | Abstract P048: Early Cardiometabolic Risk: The Prevalence of Compensatory Hyperinsulinemia in U.S. Populations. <i>Circulation</i> , 2019, 139, .  | 1.6 | 0         |
| 72 | 1444-P: Discordance between Insulin and C-Peptide Is Associated with Liver Function and Ethnicity. <i>Diabetes</i> , 2020, 69, .   | 0.3 | 0         |

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|----|--|-----|-----------|
| 73 | 1445-P: Metabolic Syndrome Subtypes Point to Distinct Origins of Glucose Intolerance. Diabetes, 2020, 69, 1445-P.  | 0.3 | 0         |
| 74 | Abstract P437: Early Insulin Resistance Responds To Lifestyle Interventions: The Premier Study. Circulation, 2020, 141, .  | 1.6 | 0         |
| 75 | Overweight is Not a Diabetes Risk Factor for Insulin-sensitive Individuals: CARDIA 30-year Follow Up. Metabolism: Clinical and Experimental, 2022, 128, 155095.  | 1.5 | 0         |
| 76 | Abstract EP06: Serum Water T <sup>2</sup> And Its Association With Cardiometabolic Health: The Premier Study. Circulation, 2022, 145, .  | 1.6 | 0         |
| 77 | Abstract P018: Overweight Is Not A Cardiovascular Risk Factor For Insulin-sensitive Individuals: CARDIA 30-year Follow Up. Circulation, 2022, 145, .   | 1.6 | 0         |
| 78 | Abstract EP05: Plasma Water T <sup>2</sup> Is A Global Marker Of Cardiometabolic Health: The Premier Study. Circulation, 2022, 145, .  | 1.6 | 0         |
| 79 | Abstract P019: Compensatory Hyperinsulinemia Is An Independent Risk Factor For Atherosclerotic Cardiovascular Disease: CARDIA 30-year Follow Up. Circulation, 2022, 145, .                             | 1.6 | 0         |
| 80 | High Prevalence of Compensatory Hyperinsulinemia in U.S. Teenagers: The 2015-2018 National Health and Nutrition Examination Survey (NHANES). Metabolism: Clinical and Experimental, 2022, 128, 155088. | 1.5 | 0         |
| 81 | Abstract 620: Water as a Universal Biosensor for Inflammation, Insulin Resistance and Dyslipidemia. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, .                                    | 1.1 | 0         |