William S Davidson

List of Publications by Year
in descending order

97 papers	7,661 citations	71102 41 h-index	51608 86 g-index
100 all docs	100 docs citations	100 times ranked	8276 citing authors

#	Article	IF	Citations
1	Stabilization of Î±-Synuclein Secondary Structure upon Binding to Synthetic Membranes. Journal of Biological Chemistry, 1998, 273, 9443-9449.	3.4	1,376
2	Cholesterol Efflux and Atheroprotection. Circulation, 2012, 125, 1905-1919.	1.6	772
3	Proteomic Analysis of Defined HDL Subpopulations Reveals Particle-Specific Protein Clusters. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 870-876.	2.4	375
4	Proteomic diversity of high density lipoproteins: our emerging understanding of its importance in lipid transport and beyond. Journal of Lipid Research, 2013, 54, 2575-2585.	4.2	302
5	High-density lipoproteins: A consensus statement from the National Lipid Association. Journal of Clinical Lipidology, 2013, 7, 484-525.	1.5	276
6	Proteomic Characterization of Human Plasma High Density Lipoprotein Fractionated by Gel Filtration Chromatography. Journal of Proteome Research, 2010, 9, 5239-5249.	3.7	213
7	Apolipoprotein A-I structural organization in high-density lipoproteins isolated from human plasma. Nature Structural and Molecular Biology, 2011, 18, 416-422.	8.2	207
8	Structure of HDL: Particle Subclasses and Molecular Components. Handbook of Experimental Pharmacology, 2015, 224, 3-51.	1.8	184
9	Structure of apolipoprotein A-I in spherical high density lipoproteins of different sizes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12176-12181.	7.1	182
10	The Structure of Apolipoprotein A-I in High Density Lipoproteins. Journal of Biological Chemistry, 2007, 282, 22249-22253.	3.4	176
11	High density lipoprotein: it's not just about lipid transport anymore. Trends in Endocrinology and Metabolism, 2011, 22, 9-15.	7.1	142
12	The Effect of High Density Lipoprotein Phospholipid Acyl Chain Composition on the Efflux of Cellular Free Cholesterol. Journal of Biological Chemistry, 1995, 270, 5882-5890.	3.4	139
13	Apolipoprotein A-IV inhibits experimental colitis. Journal of Clinical Investigation, 2004, 114, 260-269.	8.2	129
14	Loss of microRNA-128 promotes cardiomyocyte proliferation and heart regeneration. Nature Communications, 2018, 9, 700.	12.8	124
15	ABCA1-Induced Cell Surface Binding Sites for ApoA-I. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1603-1609.	2.4	122
16	Effects of Acceptor Particle Size on the Efflux of Cellular Free Cholesterol. Journal of Biological Chemistry, 1995, 270, 17106-17113.	3.4	116
17	The Role of Apolipoprotein A-I Helix 10 in Apolipoprotein-mediated Cholesterol Efflux via the ATP-binding Cassette Transporter ABCA1. Journal of Biological Chemistry, 2002, 277, 39477-39484.	3.4	110
18	A Mass Spectrometric Determination of the Conformation of Dimeric Apolipoprotein A-I in Discoidal High Density Lipoproteinsâ€. Biochemistry, 2005, 44, 8600-8607.	2.5	103

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19	Apolipoprotein A-IV improves glucose homeostasis by enhancing insulin secretion. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9641-9646.	7.1	99
20	A Three-Dimensional Molecular Model of Lipid-Free Apolipoprotein A-I Determined by Cross-Linking/Mass Spectrometry and Sequence Threadingâ€. Biochemistry, 2005, 44, 2759-2769.	2.5	98
21	The Spatial Organization of Apolipoprotein A-I on the Edge of Discoidal High Density Lipoprotein Particles. Journal of Biological Chemistry, 2003, 278, 27199-27207.	3.4	94
22	Enterically derived high-density lipoprotein restrains liver injury through the portal vein. Science, 2021, 373, .	12.6	87
23	Apolipoprotein A-IV inhibits experimental colitis. Journal of Clinical Investigation, 2004, 114, 260-269.	8.2	84
24	A Comparison of the Mouse and Human Lipoproteome: Suitability of the Mouse Model for Studies of Human Lipoproteins. Journal of Proteome Research, 2015, 14, 2686-2695.	3.7	83
25	Helix Orientation of the Functional Domains in Apolipoprotein E in Discoidal High Density Lipoprotein Particles. Journal of Biological Chemistry, 2004, 279, 14273-14279.	3.4	79
26	Ceramide Enhances Cholesterol Efflux to Apolipoprotein A-I by Increasing the Cell Surface Presence of ATP-binding Cassette Transporter A1. Journal of Biological Chemistry, 2003, 278, 40121-40127.	3.4	75
27	Distinct Proteomic Signatures in 16 HDL (High-Density Lipoprotein) Subspecies. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 2827-2842.	2.4	75
28	Apolipoprotein A-IV binds Î±IIbÎ²3 integrin and inhibits thrombosis. Nature Communications, 2018, 9, 3608.	12.8	75
29	Apolipoprotein A-I Adopts a Belt-like Orientation in Reconstituted High Density Lipoproteins. Journal of Biological Chemistry, 2001, 276, 42965-42970.	3.4	74
30	Structural Organization of the N-Terminal Domain of Apolipoprotein A-I:Â Studies of Tryptophan Mutantsâ€. Biochemistry, 1999, 38, 14387-14395.	2.5	73
31	Red Blood Cell Dysfunction Induced by High-Fat Diet. Circulation, 2015, 132, 1898-1908.	1.6	71
32	Apolipoprotein structural organization in high density lipoproteins: belts, bundles, hinges and hairpins. Current Opinion in Lipidology, 2005, 16, 295-300.	2.7	70
33	The Effects of Type 2 Diabetes on Lipoprotein Composition and Arterial Stiffness in Male Youth. Diabetes, 2013, 62, 2958-2967.	0.6	64
34	Identification and Structural Ramifications of a Hinge Domain in Apolipoprotein A-I Discoidal High-density Lipoproteins of Different Sizeâ€. Biochemistry, 2004, 43, 11717-11726.	2.5	62
35	Multi-dimensional Co-separation Analysis Reveals Proteinâ€“Protein Interactions Defining Plasma Lipoprotein Subspecies. Molecular and Cellular Proteomics, 2013, 12, 3123-3134.	3.8	62
36	A thumbwheel mechanism for APOA1 activation of LCAT activity in HDL[S]. Journal of Lipid Research, 2018, 59, 1244-1255.	4.2	59

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37	A consensus model of human apolipoprotein A-I in its monomeric and lipid-free state. Nature Structural and Molecular Biology, 2017, 24, 1093-1099.	8.2	54
38	The effects of apolipoprotein B depletion on HDL subspecies composition and function. Journal of Lipid Research, 2016, 57, 674-686.	4.2	52
39	An Amphipathic Helical Region of the N-terminal Barrel of Phospholipid Transfer Protein Is Critical for ABCA1-dependent Cholesterol Efflux. Journal of Biological Chemistry, 2008, 283, 11541-11549.	3.4	50
40	Apolipoprotein A-II alters the proteome of human lipoproteins and enhances cholesterol efflux from ABCA1. Journal of Lipid Research, 2017, 58, 1374-1385.	4.2	50
41	Apolipoprotein A-IV Reduces Hepatic Gluconeogenesis through Nuclear Receptor NR1D1. Journal of Biological Chemistry, 2014, 289, 2396-2404.	3.4	48
42	Characterization of homodimer interfaces with cross-linking mass spectrometry and isotopically labeled proteins. Nature Protocols, 2018, 13, 431-458.	12.0	47
43	The HDL Proteome Watch: Compilation of studies leads to new insights on HDL function. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2022, 1867, 159072.	2.4	42
44	Diabetes Impairs Cellular Cholesterol Efflux From ABCA1 to Small HDL Particles. Circulation Research, 2020, 127, 1198-1210.	4.5	41
45	High density lipoproteins selectively promote the survival of human regulatory T cells. Journal of Lipid Research, 2017, 58, 1514-1523.	4.2	40
46	The Structure of Dimeric Apolipoprotein A-IV and Its Mechanism of Self-Association. Structure, 2012, 20, 767-779.	3.3	39
47	Protein-Defined Subspecies of HDLs (High-Density Lipoproteins) and Differential Risk of Coronary Heart Disease in 4 Prospective Studies. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 2714-2727.	2.4	38
48	Structure of Human Apolipoprotein A-IV:â€‰ A Distinct Domain Architecture among Exchangeable Apolipoproteins with Potential Functional Implications. Biochemistry, 2004, 43, 10719-10729.	2.5	33
49	The Structure of Apolipoprotein A-II in Discoidal High Density Lipoproteins. Journal of Biological Chemistry, 2007, 282, 9713-9721.	3.4	33
50	A Three-dimensional Homology Model of Lipid-free Apolipoprotein A-IV Using Cross-linking and Mass Spectrometry. Journal of Biological Chemistry, 2008, 283, 17314-17323.	3.4	33
51	High-Density Lipoprotein Proteomics: Identifying New Drug Targets and Biomarkers by Understanding Functionality. Current Cardiovascular Risk Reports, 2010, 4, 1-8.	2.0	32
52	Purification of recombinant apolipoproteins A-I and A-IV and efficient affinity tag cleavage by tobacco etch virus protease. Journal of Lipid Research, 2009, 50, 1497-1504.	4.2	29
53	Mapping Atheroprotective Functions and Related Proteins/Lipoproteins in Size Fractionated Human Plasma. Molecular and Cellular Proteomics, 2017, 16, 680-693.	3.8	28
54	The Structure of Human Apolipoprotein A-IV as Revealed by Stable Isotope-assisted Cross-linking, Molecular Dynamics, and Small Angle X-ray Scattering. Journal of Biological Chemistry, 2014, 289, 5596-5608.	3.4	26

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55	A proteolytic method for distinguishing between lipid-free and lipid-bound apolipoprotein A-I. Journal of Lipid Research, 2001, 42, 864-872.	4.2	25
56	HDL-C vs HDL-P: How Changing One Letter Could Make a Difference in Understanding the Role of High-Density Lipoprotein in Disease. Clinical Chemistry, 2014, 60, e1-e3.	3.2	24
57	Bacterial expression and characterization of mature apolipoprotein A-I. Protein Expression and Purification, 2002, 25, 353-361.	1.3	23
58	Modulation of Apolipoprotein A-IV Lipid Binding by an Interaction between the N and C Termini. Journal of Biological Chemistry, 2007, 282, 28385-28394.	3.4	23
59	The Difference Between High Density Lipoprotein Subfractions and Subspecies: an Evolving Model in Cardiovascular Disease and Diabetes. Current Atherosclerosis Reports, 2021, 23, 23.	4.8	21
60	Specific Sequences in the N and C Termini of Apolipoprotein A-IV Modulate Its Conformation and Lipid Association. Journal of Biological Chemistry, 2005, 280, 38576-38582.	3.4	20
61	Obesity is associated with an altered HDL subspecies profile among adolescents with metabolic disease. Journal of Lipid Research, 2017, 58, 1916-1923.	4.2	20
62	Albuminuria, the High-Density Lipoprotein Proteome, and Coronary Artery Calcification in Type 1 Diabetes Mellitus. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 1483-1491.	2.4	20
63	High-Density Lipoprotein Subspecies in Health and Human Disease: Focus on Type 2 Diabetes. Methodist DeBakey Cardiovascular Journal, 2021, 15, 55.	1.0	20
64	Ceramide structural features required to stimulate ABCA1-mediated cholesterol efflux to apolipoprotein A-I. Journal of Lipid Research, 2006, 47, 2781-2788.	4.2	19
65	Interaction of ApoA-IV with NR4A1 and NR1D1 Represses G6Pase and PEPCK Transcription: Nuclear Receptor-Mediated Downregulation of Hepatic Gluconeogenesis in Mice and a Human Hepatocyte Cell Line. PLoS ONE, 2015, 10, e0142098.	2.5	19
66	Network-Based Analysis on Orthogonal Separation of Human Plasma Uncovers Distinct High Density Lipoprotein Complexes. Journal of Proteome Research, 2015, 14, 3082-3094.	3.7	19
67	Characterization of LP-Z Lipoprotein Particles and Quantification in Subjects with Liver Disease Using a Newly Developed NMR-Based Assay. Journal of Clinical Medicine, 2020, 9, 2915.	2.4	18
68	An Evaluation of the Crystal Structure of C-terminal Truncated Apolipoprotein A-I in Solution Reveals Structural Dynamics Related to Lipid Binding. Journal of Biological Chemistry, 2016, 291, 5439-5451.	3.4	16
69	Modified sites and functional consequences of 4-oxo-2-nonenal adducts in HDL that are elevated in familial hypercholesterolemia. Journal of Biological Chemistry, 2019, 294, 19022-19033.	3.4	16
70	Low-density lipoprotein receptor-related protein 1 (LRP1) is a novel receptor for apolipoprotein A4 (APOA4) in adipose tissue. Scientific Reports, 2021, 11, 13289.	3.3	16
71	Superiority of lipoprotein particle number to detect associations with arterial thickness and stiffness in obese youth with and without prediabetes. Journal of Clinical Lipidology, 2016, 10, 610-618.	1.5	15
72	The biotin-capture lipid affinity assay: a rapid method for determining lipid binding parameters for apolipoproteins. Journal of Lipid Research, 2006, 47, 440-449.	4.2	14

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73	Niacin Increases Atherogenic Proteins in High-Density Lipoprotein of Statin-Treated Subjects. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 2330-2341.	2.4	14
74	The role of hydrophobic and negatively charged surface patches of lipid-free apolipoprotein A-I in lipid binding and ABCA1-mediated cholesterol efflux. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2010, 1801, 64-69.	2.4	13
75	Pregnancy is accompanied by larger high density lipoprotein particles and compositionally distinct subspecies. Journal of Lipid Research, 2021, 62, 100107.	4.2	13
76	High yield expression and purification of recombinant human apolipoprotein A-II in Escherichia coli. Journal of Lipid Research, 2012, 53, 1708-1715.	4.2	12
77	Role of Conserved Proline Residues in Human Apolipoprotein A-IV Structure and Function. Journal of Biological Chemistry, 2015, 290, 10689-10702.	3.4	11
78	Specific sequences in N termini of apolipoprotein A-IV modulate its anorectic effect. Physiology and Behavior, 2013, 120, 136-142.	2.1	10
79	Small-angle X-ray Scattering of Apolipoprotein A-IV Reveals the Importance of Its Termini for Structural Stability. Journal of Biological Chemistry, 2013, 288, 4854-4866.	3.4	10
80	Apolipoprotein A-I modulates HDL particle size in the absence of apolipoprotein A-II. Journal of Lipid Research, 2021, 62, 100099.	4.2	10
81	A Comparison of Methods To Enhance Protein Detection of Lipoproteins by Mass Spectrometry. Journal of Proteome Research, 2015, 14, 2943-2950.	3.7	9
82	Apolipoprotein E content of VLDL limits LPL-mediated triglyceride hydrolysis. Journal of Lipid Research, 2022, 63, 100157.	4.2	9
83	Impact of genetic deletion of platform apolipoproteins on the size distribution of the murine lipoproteome. Journal of Proteomics, 2016, 146, 184-194.	2.4	8
84	Apolipoprotein A-IV Enhances Fatty Acid Uptake by Adipose Tissues of Male Mice via Sympathetic Activation. Endocrinology, 2020, 161, .	2.8	7
85	Conformational flexibility of apolipoprotein A-I amino- and carboxy-termini is necessary for lipid binding but not cholesterol efflux. Journal of Lipid Research, 2022, 63, 100168.	4.2	7
86	Pulmonary surfactant protein B carried by HDL predicts incident CVD in patients with type 1 diabetes. Journal of Lipid Research, 2022, 63, 100196.	4.2	7
87	Effects of Multiple Freeze/Thaw Cycles on Measurements of Potential Novel Biomarkers Associated With Adverse Pregnancy Outcomes. Journal of Clinical and Laboratory Medicine, 2017, 2, .	0.1	6
88	Functional recombinant apolipoprotein A5 that is stable at high concentrations at physiological pH. Journal of Lipid Research, 2020, 61, 244-251.	4.2	4
89	Studies in genetically modified mice implicate maternal HDL as a mediator of fetal growth. FASEB Journal, 2018, 32, 717-727.	0.5	4
90	Highly conserved amino acid residues in apolipoprotein A1 discordantly induce high density lipoprotein assembly in vitro and in vivo. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158794.	2.4	3

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91	Apolipoprotein A-IV enhances cholecystokinnin secretion. Physiology and Behavior, 2018, 188, 11-17.	2.1	2
92	High-Density Lipoproteins-Associated Proteins and Subspecies Related to Arterial Stiffness in Young Adults with Type 2 Diabetes Mellitus. Complexity, 2018, 2018, 1-14.	1.6	0
93	Structure of dimeric apoAâ€Ⅳ: basis for HDL model. FASEB Journal, 2011, 25, 938.1.	0.5	0
94	Abstract 411: An Anion-Exchange Chromatography Isolated Subfraction of Mouse Apolipoprotein A-I Is Unable to Activate Cellular Cholesterol Release from Mouse Peritoneal Macrophage Foam Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, .	2.4	0
95	Red Blood Cells As a Novel Mediator of Chronic Inflammation in Diet-Induced Obesity: Implications for Atherosclerosis. Blood, 2012, 120, 3198-3198.	1.4	0
96	The structure of apoAâ€Ⅰ on HDL reveals novel insights into its regulation of lipoprotein composition and function. FASEB Journal, 2019, 33, .	0.5	0
97	Abstract 114: Correlation of Specific HDL Subspecies with Arterial Stiffness in Youth with Type 2 Diabetes. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, .	2.4	0