David A Keire

List of Publications by Year
in descending order

120	2,922	147726	214721
papers	citations	31 h-index	47 g-index

121	121	121	2885
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	International Regulatory Collaboration on the Analysis of Nitrosamines in Metformin-Containing Medicines. AAPS Journal, 2022, 24, 56.	2.2	15
2	Minor N-Glycan Mapping of Monoclonal Antibody Therapeutics Using Middle-Down NMR Spectroscopy. Molecular Pharmaceutics, 2021, 18, 441-450.	2.3	9
3	A Real-Time NMR Method for Measurement of In Vitro Aggregation Kinetics Of Degarelix Drug Products. AAPS PharmSciTech, 2021, 22, 73.	1.5	2
4	In Vitro Analysis ofN-Nitrosodimethylamine (NDMA) Formation From Ranitidine Under Simulated Gastrointestinal Conditions. JAMA Network Open, 2021, 4, e2118253.	2.8	14
5	NMR Spectroscopy for Protein Higher Order Structure Similarity Assessment in Formulated Drug Products. Molecules, 2021, 26, 4251.	1.7	11
6	Effect of Oral Ranitidine on Urinary Excretion ofN-Nitrosodimethylamine (NDMA). JAMA - Journal of the American Medical Association, 2021, 326, 240.	3.8	21
7	Risk of N-Nitrosodimethylamine (NMDA) Formation With Ranitidine. JAMA - Journal of the American Medical Association, 2021, 326, 2077.	3.8	2
8	One- and two-dimensional NMR techniques. , 2020, , 375-430.		0
9	Raman mapping of fentanyl transdermal delivery systems with off-label modifications. Analyst, The, 2020, 145, 953-962.	1.7	7
10	Eliminating Spiked Bovine Spongiform Encephalopathy Agent Activity from Heparin. Emerging Infectious Diseases, 2020, 26, 2478-2480.	2.0	4
11	Processing bovine intestinal mucosa to active heparin removes spiked BSE agent. Biologicals, 2020, 67, 56-61.	0.5	4
12	Sedimentation Velocity Analytical Ultracentrifugation Analysis of Marketed Rituximab Drug Product Size Distribution. Pharmaceutical Research, 2020, 37, 238.	1.7	1
13	An NMR Protocol for In Vitro Paclitaxel Release from an Albumin-Bound Nanoparticle Formulation. AAPS PharmSciTech, 2020, 21, 136.	1.5	6
14	Multiplexed Comparative Analysis of Intact Glycopeptides Using Electron-Transfer Dissociation and Synchronous Precursor Selection Based Triple-Stage Mass Spectrometry. Analytical Chemistry, 2020, 92, 7547-7555.	3.2	11
15	An NMR-Based Similarity Metric for Higher Order Structure Quality Assessment Among U.S. Marketed Insulin Therapeutics. Journal of Pharmaceutical Sciences, 2020, 109, 1519-1528.	1.6	16
16	Assessment of risk of variant creutzfeldtâ€Jakob disease (vCJD) from use of bovine heparin. Pharmacoepidemiology and Drug Safety, 2020, 29, 575-581.	0.9	3
17	A Cautionary Tale: Quantitative LC-HRMS Analytical Procedures for the Analysis of N-Nitrosodimethylamine in Metformin. AAPS Journal, 2020, 22, 89.	2.2	41
18	Editorial: Heparin and Related Polysaccharides. Frontiers in Medicine, 2020, 7, 211.	1.2	1

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19	1D and 2D-HSQC NMR: Two Methods to Distinguish and Characterize Heparin From Different Animal and Tissue Sources. Frontiers in Medicine, 2019, 6, 142.	1.2	14
20	Screening of Polysorbate-80 Composition by High Resolution Mass Spectrometry with Rapid H/D Exchange. Analytical Chemistry, 2019, 91, 14649-14656.	3.2	15
21	Particle Size Distribution Analysis of OTC Aerosol or Powder Drug Products With Potential for Inadvertent Inhalation Exposure to Consumers. Journal of Pharmaceutical Sciences, 2019, 108, 1506-1511.	1.6	2
22	Analytical Tools for Physicochemical Characterization and Fingerprinting. AAPS Advances in the Pharmaceutical Sciences Series, 2019, , 91-113.	0.2	1
23	The impact of standard accelerated stability conditions on antibody higher order structure as assessed by mass spectrometry. MAbs, 2019, 11, 930-941.	2.6	17
24	An in vitro approach for evaluating the oral abuse deterrence of solid oral extended-release opioids with properties intended to deter abuse via chewing. International Journal of Pharmaceutics, 2019, 561, 305-313.	2.6	5
25	Manufacturing Heparin with Equivalent Chemical Composition from Different Animal Sources. Thrombosis and Haemostasis, 2019, 119, 688-688.	1.8	4
26	Enabling adoption of 2D-NMR for the higher order structure assessment of monoclonal antibody therapeutics. MAbs, 2019, 11, 94-105.	2.6	67
27	A Simple and Noninvasive DOSY NMR Method for Droplet Size Measurement of Intact Oil-In-Water Emulsion Drug Products. Journal of Pharmaceutical Sciences, 2019, 108, 815-820.	1.6	15
28	Effects of Dissolution Medium pH and Simulated Gastrointestinal Contraction on Drug Release From Nifedipine Extended-Release Tablets*. Journal of Pharmaceutical Sciences, 2019, 108, 1189-1194.	1.6	12
29	Application of Ultra-Centrifugation and Bench-Top 19F NMR for Measuring Drug Phase Partitioning for the Ophthalmic Oil-in-Water Emulsion Products. AAPS PharmSciTech, 2018, 19, 1647-1651.	1.5	10
30	Chemometric Methods to Quantify 1D and 2D NMR Spectral Differences Among Similar Protein Therapeutics. AAPS PharmSciTech, 2018, 19, 1011-1019.	1.5	20
31	Development of methods for data quantitation of spiked salmon host cell DNA in protamine sulfate by qPCR. Data in Brief, 2018, 21, 644-652.	0.5	0
32	A General LC-MS/MS Method for Monitoring Potential Î²-Lactam Contamination in Drugs and Drug-Manufacturing Surfaces. AAPS Journal, 2018, 20, 70.	2.2	4
33	Novel Immunoassay for Complement Activation by PF4/Heparin Complexes. Thrombosis and Haemostasis, 2018, 118, 1484-1487.	1.8	7
34	Comparative Evaluation of U.S. Brand and Generic Intravenous Sodium Ferric Gluconate Complex in Sucrose Injection: Physicochemical Characterization. Nanomaterials, 2018, 8, 25.	1.9	15
35	Rational Selection, Criticality Assessment, and Tiering of Quality Attributes and Test Methods for Analytical Similarity Evaluation of Biosimilars. AAPS Journal, 2018, 20, 68.	2.2	34
36	Quantitation of residual host cell DNA in protaminesulfate drug product by qPCR. Journal of Pharmaceutical and Biomedical Analysis, 2018, 160, 238-243.	1.4	3

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37	Chemical Structure and Composition of Major Glycans Covalently Linked to Therapeutic Monoclonal Antibodies by Middle-Down Nuclear Magnetic Resonance. Analytical Chemistry, 2018, 90, 11016-11024.	3.2	28
38	A Heparin Purification Process Removes Spiked Transmissible Spongiform Encephalopathy Agent. AAPS Journal, 2017, 19, 765-771.	2.2	17
39	A LC-MS All-in-One Workflow for Site-Specific Location, Identification and Quantification of N-/O-Glycosylation in Human Chorionic Gonadotropin Drug Products. AAPS Journal, 2017, 19, 846-855.	2.2	16
40	InÂVitro Evaluation of Nasogastric Tube Delivery Performance of Esomeprazole Magnesium Delayed-Release Capsules. Journal of Pharmaceutical Sciences, 2017, 106, 1859-1864.	1.6	11
41	Application of 2D-NMR with room temperature NMR probes for the assessment of the higher order structure of filgrastim. Journal of Pharmaceutical and Biomedical Analysis, 2017, 141, 229-233.	1.4	14
42	Heparin and homogeneous model heparin oligosaccharides form distinct complexes with protamine: Light scattering and zeta potential analysis. Journal of Pharmaceutical and Biomedical Analysis, 2017, 140, 113-121.	1.4	12
43	Qualification of HSQC methods for quantitative composition of heparin and low molecular weight heparins. Journal of Pharmaceutical and Biomedical Analysis, 2017, 136, 92-105.	1.4	48
44	PF4-HIT antibody (KKO) complexes activate broad innate immune and inflammatory responses. Thrombosis Research, 2017, 159, 39-47.	0.8	14
45	Comparison of NMR and Dynamic Light Scattering for Measuring Diffusion Coefficients of Formulated Insulin: Implications for Particle Size DistributionÂMeasurements in Drug Products. AAPS Journal, 2017, 19, 1760-1766.	2.2	45
46	A Retrospective Evaluation of the Use of Mass Spectrometry in FDA Biologics License Applications. Journal of the American Society for Mass Spectrometry, 2017, 28, 786-794.	1.2	92
47	Combining NMR Spectroscopy and Chemometrics to Monitor Structural Features of Crude Hep-arin. Molecules, 2017, 22, 1146.	1.7	26
48	Ghost-Pill-Buster: A Case Study of Intact Levetiracetam Extended-Release Tablets after Dissolution Testing. CNS Drugs, 2016, 30, 455-460.	2.7	9
49	The US regulatory and pharmacopeia response to the global heparin contamination crisis. Nature Biotechnology, 2016, 34, 625-630.	9.4	93
50	Simple NMR methods for evaluating higher order structures of monoclonal antibody therapeutics with quinary structure. Journal of Pharmaceutical and Biomedical Analysis, 2016, 128, 398-407.	1.4	46
51	Precision and robustness of 2D-NMR for structure assessment of filgrastim biosimilars. Nature Biotechnology, 2016, 34, 139-141.	9.4	62
52	Modern analytics for naturally derived complex drug substances: NMR and MS tests for protamine sulfate from chum salmon. Analytical and Bioanalytical Chemistry, 2015, 407, 749-759.	1.9	18
53	Modern analytics for synthetically derived complex drug substances: NMR, AFFFâ€“MALS, and MS tests for glatiramer acetate. Analytical and Bioanalytical Chemistry, 2015, 407, 8647-8659.	1.9	22
54	Synthesis and detection of N-sulfonated oversulfated chondroitin sulfate in marketplace heparin. Analytical Biochemistry, 2015, 490, 52-54.	1.1	5

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55	NMR profiling of biomolecules at natural abundance using 2D 1Hâ€“15N and 1Hâ€“13C multiplicity-separated (MS) HSQC spectra. Journal of Magnetic Resonance, 2015, 251, 65-70.	1.2	22
56	One- and Two-Dimensional NMR Techniques for Biopharmaceuticalsâˆ—. , 2015, , 341-383.		2
57	Chemoenzymatic synthesis and structural characterization of 2-O-sulfated glucuronic acid-containing heparan sulfate hexasaccharides. Glycobiology, 2014, 24, 681-692.	1.3	29
58	Analytical techniques and bioactivity assays to compare the structure and function of filgrastim (granulocyte-colony stimulating factor) therapeutics from different manufacturers. Analytical and Bioanalytical Chemistry, 2014, 406, 6559-6567.	1.9	23
59	Characterization of currently marketed heparin products: Key tests for LMWH quality assurance. Journal of Pharmaceutical and Biomedical Analysis, 2013, 85, 99-107.	1.4	30
60	Analyses of marketplace tacrolimus drug product quality: Bioactivity, NMR and LCâ€“MS. Journal of Pharmaceutical and Biomedical Analysis, 2013, 85, 108-117.	1.4	11
61	Structural comparison of two anti-CD20 monoclonal antibody drug products using middle-down mass spectrometry. Analyst, The, 2013, 138, 3058.	1.7	49
62	Characterization of currently marketed heparin products: composition analysis by 2D-NMR. Analytical Methods, 2013, 5, 2984.	1.3	40
63	High-Throughput Differentiation of Heparin from Other Glycosaminoglycans by Pyrolysis Mass Spectrometry. Analytical Chemistry, 2013, 85, 7405-7412.	3.2	18
64	Physicochemical Characterization of Complex Drug Substances: Evaluation of Structural Similarities and Differences of Protamine Sulfate from Various Sources. AAPS Journal, 2012, 14, 619-626.	2.2	24
65	Characterization of currently marketed heparin products: Adverse event relevant bioassays. Journal of Pharmaceutical and Biomedical Analysis, 2012, 67-68, 28-35.	1.4	7
66	Characterization of currently marketed heparin products: Analysis of heparin digests by RPIP-UHPLCâ€“QTOF-MS. Journal of Pharmaceutical and Biomedical Analysis, 2012, 67-68, 42-50.	1.4	40
67	Detection of native chondroitin sulfate impurities in heparin sodium with a colorimetric micro-plate based assay. Analytical Methods, 2012, 4, 1488.	1.3	8
68	Sensitive Detection of Oversulfated Chondroitin Sulfate in Heparin Sodium or Crude Heparin with a Colorimetric Microplate Based Assay. Analytical Chemistry, 2011, 83, 3422-3430.	3.2	38
69	Class Modeling Analysis of Heparin ¹H NMR Spectral Data Using the Soft Independent Modeling of Class Analogy and Unequal Class Modeling Techniques. Analytical Chemistry, 2011, 83, 1030-1039.	3.2	22
70	Detection of Possible Economically Motivated Adulterants in Heparin Sodium and Low Molecular Weight Heparins with a Colorimetric Microplate Based Assay. Analytical Chemistry, 2011, 83, 7102-7108.	3.2	25
71	Effects of glycine-extended and serine13-phosphorylated forms of peptide YY on food intake in rats. Peptides, 2011, 32, 770-775.	1.2	4
72	Characterization of currently marketed heparin products: key tests for quality assurance. Analytical and Bioanalytical Chemistry, 2011, 399, 581-591.	1.9	38

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73	Determination of galactosamine impurities in heparin samples by multivariate regression analysis of their 1H NMR spectra. Analytical and Bioanalytical Chemistry, 2011, 399, 635-649.	1.9	24
74	Identification of heparin samples that contain impurities or contaminants by chemometric pattern recognition analysis of proton NMR spectral data. Analytical and Bioanalytical Chemistry, 2011, 401, 939-955.	1.9	26
75	Characterization of currently marketed heparin products: analysis of molecular weight and heparinase-I digest patterns. Analytical and Bioanalytical Chemistry, 2011, 401, 2445-2454.	1.9	33
76	Combining 1H NMR spectroscopy and chemometrics to identify heparin samples that may possess dermatan sulfate (DS) impurities or oversulfated chondroitin sulfate (OSCS) contaminants. Journal of Pharmaceutical and Biomedical Analysis, 2011, 54, 1020-1029.	1.4	23
77	Analysis of crude heparin by 1H NMR, capillary electrophoresis, and strong-anion-exchange-HPLC for contamination by over sulfated chondroitin sulfate. Journal of Pharmaceutical and Biomedical Analysis, 2010, 51, 921-926.	1.4	61
78	PYY(1-36) is the major form of PYY in rat distal small intestine: Quantification using high-resolution mass spectrometry. Regulatory Peptides, 2010, 165, 151-157.	1.9	10
79	Assay of possible economically motivated additives or native impurities levels in heparin by 1H NMR, SAX-HPLC, and anticoagulation time approaches. Journal of Pharmaceutical and Biomedical Analysis, 2010, 52, 656-664.	1.4	38
80	Bradykinin forming capacity of oversulfated chondroitin sulfate contaminated heparin in vitro. Biomaterials, 2010, 31, 5741-5748.	5.7	31
81	Characterization of Currently Marketed Heparin Products: Reversed-Phase Ion-Pairing Liquid Chromatography Mass Spectrometry of Heparin Digests. Analytical Chemistry, 2010, 82, 9865-9870.	3.2	45
82	The RAPID Method for Blood Processing Yields New Insight in Plasma Concentrations and Molecular Forms of Circulating Gut Peptides. Journal of Clinical Endocrinology and Metabolism, 2009, 94, 4116-4116.	1.8	1
83	The RAPID Method for Blood Processing Yields New Insight in Plasma Concentrations and Molecular Forms of Circulating Gut Peptides. Endocrinology, 2009, 150, 5113-5118.	1.4	81
84	The RAPID Method for Blood Processing Yields New Insight in Plasma Concentrations and Molecular Forms of Circulating Gut Peptides. Endocrine Reviews, 2009, 30, 749-749.	8.9	0
85	A new endogenous form of PYY isolated from canine ileum: Gly-extended PYY(1-36). Regulatory Peptides, 2008, 151, 61-70.	1.9	6
86	The Micelle-Associated 3D Structures of Boc-Y(SO3)-Nle-G-W-Nle-D-2-phenylethylester (JMV-180) and CCK-8(s) Share Conformational Elements of a Calculated CCK1Receptor-Bound Model. Journal of Medicinal Chemistry, 2008, 51, 3742-3754.	2.9	4
87	The Lipid-Associated 3D Structure of SPA, a Broad-Spectrum Neuropeptide Antagonist with Anticancer Properties. Biophysical Journal, 2006, 91, 4478-4489.	0.2	6
88	Crucial role of position 40 for interactions of CCK-58 revealed by sequence of cat CCK-58. Biochemical and Biophysical Research Communications, 2006, 348, 819-825.	1.0	4
89	Sequence Variation Outside the "Active" Region of Dog and Rabbit Cholecystokinin-58 Results in Bioactivity Differences. Pancreas, 2006, 32, 306-313.	0.5	7
90	Daily, intermittent intravenous infusion of peptide YY(3-36) reduces daily food intake and adiposity in rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R298-R305.	0.9	94

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91	Peripheral Cholecystokinin. , 2006, , 1013-1022.		0
92	Water and enzyme secretion are tightly coupled in pancreatic secretion stimulated by food or CCK-58 but not by CCK-8. American Journal of Physiology - Renal Physiology, 2005, 288, G866-G879.	1.6	34
93	Differential bile-pancreatic secretory effects of CCK-58 and CCK-8. American Journal of Physiology - Renal Physiology, 2004, 286, G395-G402.	1.6	24
94	Identification of nonsulfated cholecystokinin-58 in canine intestinal extracts and its biological properties. American Journal of Physiology - Renal Physiology, 2004, 287, G326-G333.	1.6	18
95	Synthesis of biologically active canine CCK-58. Regulatory Peptides, 2003, 113, 71-77.	1.9	12
96	Rat progastrin processing yields peptides with altered potency at the CCK-B receptor. Regulatory Peptides, 2003, 113, 115-124.	1.9	8
97	CCK-58 is the only detectable endocrine form of cholecystokinin in rat. American Journal of Physiology - Renal Physiology, 2003, 285, G255-G265.	1.6	70
98	Receptor Subtypes: Species Variations in Secretin Affect Potency for Pancreatic but Not Gastric Secretion. Pancreas, 2003, 26, 300-305.	0.5	2
99	Differences in Receptor Binding and Stability to Enzymatic Digestion Between CCK-8 and CCK-58. Pancreas, 2002, 25, e50-e55.	0.5	25
100	Vinyl Sulfone Bifunctional Derivatives of DOTA Allow Sulfhydryl- or Amino-Directed Coupling to Antibodies. Conjugates Retain Immunoreactivity and Have Similar Biodistributions. Bioconjugate Chemistry, 2002, 13, 110-115.	1.8	26
101	NMR evidence for different conformations of the bioactive region of rat CCK-8 and CCK-58. Biochemical and Biophysical Research Communications, 2002, 293, 1014-1020.	1.0	21
102	Structure and receptor binding of PYY analogs. Peptides, 2002, 23, 305-321.	1.2	110
103	Chelators for Radioimmunotherapy:Â I. NMR and Ab Initio Calculation Studies on 1,4,7,10-Tetra(carboxyethyl)-1,4,7,10-tetraazacyclododecane (DO4Pr) and 1,4,7-Tris(carboxymethyl)-10-(carboxyethyl)-1,4,7,10-tetraazacyclododecane (DO3A1Pr). Inorganic Chemistry, 2001, 40, 4310-4318.	1.9	36
104	Diethyl Phthalate, a Chemotactic Factor Secreted by Helicobacter pylori. Journal of Biological Chemistry, 2001, 276, 48847-48853.	1.6	20
105	Primary structures of PYY, [Pro³⁴]PYY, and PYY-(3â€“36) confer different conformations and receptor selectivity. American Journal of Physiology - Renal Physiology, 2000, 279, G126-G131.	1.6	102
106	Solution Structure of Monomeric Peptide YY Supports the Functional Significance of the PP-Fold,. Biochemistry, 2000, 39, 9935-9942.	1.2	42
107	NMR Studies of the Metal-Loading Kinetics and Acidâ^'Base Chemistry of DOTA and Butylamide-DOTA. Bioconjugate Chemistry, 1999, 10, 454-463.	1.8	24
108	Mechanism and Energetics for Complexation of90Y with 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic Acid (DOTA), a Model for Cancer Radioimmunotherapy. Journal of the American Chemical Society, 1999, 121, 6142-6151.	6.6	73

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109	Identical Primary Sequence but Different Conformations of the Bioactive Regions of Canine CCK-8 and CCK-58. Biochemical and Biophysical Research Communications, 1999, 266, 400-404.	1.0	16
110	The orientation and dynamics of substance P in lipid environments. Protein Science, 1998, 7, 2438-2450.	3.1	15
111	The interaction of Î²-amyloid protein fragment (12-28) with lipid environments. Protein Science, 1997, 6, 666-675.	3.1	49
112	The conformation of substance P in lipid environments. Biophysical Journal, 1996, 70, 1716-1727.	0.2	57
113	Oxidation/reduction chemistry of thiol groups in biological molecules.. Journal of Inorganic Biochemistry, 1993, 51, 27.	1.5	1
114	Nuclear magnetic resonance studies of the binding of captopril and penicillamine by serum albumin. Biochemical Pharmacology, 1993, 46, 1059-1069.	2.0	24
115	Phosphorus-31 nuclear magnetic resonance spectra and dissociation constants of lac repressor headpiece.cntdot.duplex operator complexes: The importance of phosphate ester backbone flexibility in protein-DNA recognition. Biochemistry, 1993, 32, 6863-6874.	1.2	27
116	Microscopic protonation equilibria and solution conformations of coenzyme A and coenzyme A disulfides. Journal of Organic Chemistry, 1992, 57, 4427-4431.	1.7	24
117	Kinetics and equilibria of thiol/disulfide interchange reactions of selected biological thiols and related molecules with oxidized glutathione. Journal of Organic Chemistry, 1992, 57, 123-127.	1.7	127
118	Characterization of symmetrical and unsymmetrical thiol-disulfide interchange reactions by one-and two-dimensional magnetization transfer NMR spectroscopy. Magnetic Resonance in Chemistry, 1992, 30, 746-753.	1.1	4
119	Nuclear magnetic resonance studies of thiol/disulfide chemistry. Bioorganic Chemistry, 1989, 17, 257-267.	2.0	10
120	Multiphase Drug Distribution and Exchange in Oil-in-Water Nanoemulsion Revealed by High-Resolution ¹⁹F qNMR. Molecular Pharmaceutics, 0, , .	2.3	2