

Richard G Haverkamp

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4258591/publications.pdf>

Version: 2024-02-01

100
papers

3,861
citations

136950

32
h-index

128289

60
g-index

101
all docs

101
docs citations

101
times ranked

5074
citing authors

#	ARTICLE	IF	CITATIONS
1	Silver Nanoparticles Disrupt Wheat (<i>Triticum aestivum</i> L.) Growth in a Sand Matrix. <i>Environmental Science & Technology</i> , 2013, 47, 1082-1090.	10.0	299
2	The mechanism of metal nanoparticle formation in plants: limits on accumulation. <i>Journal of Nanoparticle Research</i> , 2009, 11, 1453-1463.	1.9	240
3	Structural basis for rodlet assembly in fungal hydrophobins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3621-3626.	7.1	218
4	Electrocatalytic activity of IrO ₂ –RuO ₂ supported on Sb-doped SnO ₂ nanoparticles. <i>Electrochimica Acta</i> , 2010, 55, 1978-1984.	5.2	173
5	Phosphorus removal by an “active” slag filter—a decade of full scale experience. <i>Water Research</i> , 2006, 40, 113-118.	11.3	152
6	Gold nanoparticles produced in a microalga. <i>Journal of Nanoparticle Research</i> , 2011, 13, 6439-6445.	1.9	140
7	The Hydrophobin EAS Is Largely Unstructured in Solution and Functions by Forming Amyloid-Like Structures. <i>Structure</i> , 2001, 9, 83-91.	3.3	139
8	Production of hydrogen by the electrochemical reforming of glycerol–water solutions in a PEM electrolysis cell. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 4649-4654.	7.1	125
9	Pick your carats: nanoparticles of gold–silver–copper alloy produced in vivo. <i>Journal of Nanoparticle Research</i> , 2007, 9, 697-700.	1.9	124
10	Silver and gold nanoparticles in plants: sites for the reduction to metal. <i>Metallomics</i> , 2011, 3, 628.	2.4	117
11	Accumulation of Gold Nanoparticles in Brassica Juncea. <i>International Journal of Phytoremediation</i> , 2007, 9, 197-206.	3.1	108
12	Heterogeneity of milk fat globule membrane structure and composition as observed using fluorescence microscopy techniques. <i>International Dairy Journal</i> , 2008, 18, 1081-1089.	3.0	96
13	Iridium–ruthenium single phase mixed oxides for oxygen evolution: Composition dependence of electrocatalytic activity. <i>Electrochimica Acta</i> , 2012, 70, 158-164.	5.2	88
14	Revisiting the interpretation of casein micelle SAXS data. <i>Soft Matter</i> , 2016, 12, 6937-6953.	2.7	78
15	Phosphorus Removal Mechanisms in Active Slag Filters Treating Waste Stabilization Pond Effluent. <i>Environmental Science & Technology</i> , 2007, 41, 3296-3301.	10.0	73
16	Solving the mystery of the internal structure of casein micelles. <i>Soft Matter</i> , 2015, 11, 2723-2725.	2.7	68
17	Direct observation of the asphaltene structure in paving-grade bitumen using confocal laser-scanning microscopy. <i>Journal of Microscopy</i> , 2004, 215, 149-155.	1.8	67
18	Nanostructure of electrospun collagen: Do electrospun collagen fibers form native structures?. <i>Materialia</i> , 2018, 3, 90-96.	2.7	67

#	ARTICLE	IF	CITATIONS
19	Stability of probiotic <i>Lactobacillus paracasei</i> during storage as affected by the drying method. <i>International Dairy Journal</i> , 2014, 39, 1-7.	3.0	65
20	Modelling the dissolution of alumina powder in cryolite. <i>Chemical Engineering and Processing: Process Intensification</i> , 1998, 37, 177-187.	3.6	64
21	Studies of the microstructure of polymer-modified bitumen emulsions using confocal laser scanning microscopy. <i>Journal of Microscopy</i> , 2001, 204, 252-257.	1.8	57
22	Energy resolved XPS depth profile of (IrO_2 , RuO_2), $\text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (Sb}_{2\text{S}_3}$ nanoparticle structure. <i>Surface and Interface Analysis</i> , 2011, 43, 847-855.	1.8	54
23	Multifunctional Inorganic-Binding Beads Self-Assembled Inside Engineered Bacteria. <i>Bioconjugate Chemistry</i> , 2008, 19, 2072-2080.	3.6	52
24	Stretching Single Molecules of Connective Tissue Glycans to Characterize Their Shape-Maintaining Elasticity. <i>Biomacromolecules</i> , 2005, 6, 1816-1818.	5.4	50
25	Collagen Orientation and Leather Strength for Selected Mammals. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 887-892.	5.2	45
26	Synthesis and Characterization of $\text{LaCr}_{1-x}\text{Ni}_x\text{O}_3$ Perovskite Oxide Catalysts. <i>Journal of Catalysis</i> , 1997, 166, 315-323.	6.2	43
27	Collagen Fibril Diameter and Leather Strength. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 11524-11531.	5.2	41
28	Changes to Collagen Structure during Leather Processing. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 2499-2505.	5.2	41
29	Investigation of morphological changes to <i>Staphylococcus aureus</i> induced by ovine-derived antimicrobial peptides using TEM and AFM. <i>FEMS Microbiology Letters</i> , 2004, 240, 105-110.	1.8	39
30	Collagen Fibril Structure and Strength in Acellular Dermal Matrix Materials of Bovine, Porcine, and Human Origin. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 1026-1038.	5.2	38
31	Adsorption of hydrogen fluoride on alumina. <i>Surface and Interface Analysis</i> , 1992, 19, 139-144.	1.8	33
32	Nanoparticles of IrO_2 or $\text{Sb}^{\text{IV}}\text{SnO}_2$ increase the performance of iridium oxide DSA electrodes. <i>Journal of Materials Science</i> , 2012, 47, 1135-1141.	3.7	33
33	Collagen Extraction from Animal Skin. <i>Biology</i> , 2022, 11, 905.	2.8	32
34	Collagen Fibril Orientation in Ovine and Bovine Leather Affects Strength: A Small Angle X-ray Scattering (SAXS) Study. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 9972-9979.	5.2	31
35	Leather Structure Determination by Small-Angle X-ray Scattering (SAXS): Cross Sections of Ovine and Bovine Leather. <i>Journal of Agricultural and Food Chemistry</i> , 2010, 58, 5286-5291.	5.2	30
36	Poisson's ratio of collagen fibrils measured by small angle X-ray scattering of strained bovine pericardium. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	30

#	ARTICLE	IF	CITATIONS
37	Effects of Redox Potential and pH Changes on Phosphorus Retention by Melter Slag Filters Treating Wastewater. <i>Environmental Science & Technology</i> , 2007, 41, 6585-6590.	10.0	29
38	Assessment of physical techniques to regenerate active slag filters removing phosphorus from wastewater. <i>Water Research</i> , 2009, 43, 277-282.	11.3	29
39	Biophysical characterization of ovine forestomach extracellular matrix biomaterials. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 96B, 67-75.	3.4	29
40	Model for stretching elastic biopolymers which exhibit conformational transformations. <i>Physical Review E</i> , 2007, 75, 021907.	2.1	28
41	The digestion of New Zealand ilmenite by hydrochloric acid. <i>Hydrometallurgy</i> , 2016, 163, 198-203.	4.3	28
42	X-ray pair distribution function analysis of nanostructured materials using a Mythen detector. <i>Journal of Synchrotron Radiation</i> , 2009, 16, 849-856.	2.4	27
43	Collagen Fibril Alignment and Deformation during Tensile Strain of Leather: A Small-Angle X-ray Scattering Study. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 1201-1208.	5.2	27
44	Stabilizing Chromium from Leather Waste in Biochar. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 1864-1870.	6.7	27
45	Stretching single polysaccharide molecules using AFM: A potential method for the investigation of the intermolecular uronate distribution of alginate?. <i>Food Hydrocolloids</i> , 2008, 22, 18-23.	10.7	26
46	Age Dependent Differences in Collagen Alignment of Glutaraldehyde Fixed Bovine Pericardium. <i>BioMed Research International</i> , 2014, 2014, 1-10.	1.9	22
47	Collagen cross linking and fibril alignment in pericardium. <i>RSC Advances</i> , 2015, 5, 3611-3618.	3.6	22
48	An XPS study of the fluorination of carbon anodes in molten NaF-AlF ₃ -CaF ₂ . <i>Journal of Materials Science</i> , 2012, 47, 1262-1267.	3.7	21
49	A Decade of Nanoparticle Research in Australia and New Zealand. <i>Particulate Science and Technology</i> , 2010, 28, 1-40.	2.1	20
50	Collagen fibril strain, recruitment and orientation for pericardium under tension and the effect of cross links. <i>RSC Advances</i> , 2015, 5, 103703-103712.	3.6	20
51	Investigation of the effects of fine structure on the nanomechanical properties of pectin. <i>Physical Review E</i> , 2007, 76, 021927.	2.1	19
52	Age Hardening Potential of Tall Oil Pitch Modified Bitumen. <i>Road Materials and Pavement Design</i> , 2007, 8, 467-481.	4.0	17
53	Ozone Production in a High Frequency Dielectric Barrier Discharge Generator. <i>Ozone: Science and Engineering</i> , 2002, 24, 321-328.	2.5	16
54	Looseness in bovine leather: microstructural characterization. <i>Journal of the Science of Food and Agriculture</i> , 2016, 96, 2731-2736.	3.5	15

#	ARTICLE	IF	CITATIONS
55	XPS study of the changes during the service life of polyester powder coatings. <i>Surface and Interface Analysis</i> , 2002, 33, 330-334.	1.8	14
56	Collagen Fibril Orientation and Tear Strength across Ovine Skins. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 12327-12332.	5.2	14
57	Collagen Fibril Response to Strain in Scaffolds from Ovine Forestomach for Tissue Engineering. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2550-2558.	5.2	14
58	Effect of collagen packing and moisture content on leather stiffness. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 90, 1-10.	3.1	13
59	Effect of Oxazolidine E on Collagen Fibril Formation and Stabilization of the Collagen Matrix. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 6813-6822.	5.2	12
60	Mechanical model for a collagen fibril pair in extracellular matrix. <i>European Biophysics Journal</i> , 2009, 38, 487-493.	2.2	12
61	Force-extension formula for the worm-like chain model from a variational principle. <i>Journal of Theoretical Biology</i> , 2010, 262, 498-504.	1.7	12
62	The influence of water, lanolin, urea, proline, paraffin and fatliquor on collagen D-spacing in leather. <i>RSC Advances</i> , 2017, 7, 40658-40663.	3.6	12
63	Collagen Fibril Intermolecular Spacing Changes with 2-Propanol: A Mechanism for Tissue Stiffness. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2524-2532.	5.2	12
64	Acellular dermal matrix collagen responds to strain by intermolecular spacing contraction with fibril extension and rearrangement. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 79, 1-8.	3.1	12
65	Adhesive Properties of Tall Oil Pitch Modified Bitumen. <i>Road Materials and Pavement Design</i> , 2007, 8, 449-465.	4.0	11
66	Antimicrobial and immunomodulatory activities of an ovine proline/arginine-rich cathelicidin. <i>International Journal of Antimicrobial Agents</i> , 2010, 35, 288-291.	2.5	11
67	An EXAFS and XANES Study of V, Ni, and Fe Speciation in Cokes for Anodes Used in Aluminum Production. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019, 50, 2969-2981.	2.1	11
68	Entropic and Enthalpic Contributions to the Chair [→] Boat Conformational Transformation in Dextran under Single Molecule Stretching. <i>Journal of Physical Chemistry B</i> , 2007, 111, 13653-13657.	2.6	10
69	Electronic Structure and Growth of Electrochemically Formed Iridium Oxide Films. <i>Journal of the Electrochemical Society</i> , 2017, 164, F1662-F1670.	2.9	10
70	A XANES Study of Sulfur Speciation and Reactivity in Cokes for Anodes Used in Aluminum Production. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 1434-1443.	2.1	9
71	Collagen arrangement and strength in sausage casings produced from natural intestines. <i>Food Hydrocolloids</i> , 2022, 129, 107612.	10.7	9
72	Hydrophobin genes and their expression in conidial and aconidial <i>Neurospora</i> species. <i>Fungal Genetics and Biology</i> , 2007, 44, 250-257.	2.1	7

#	ARTICLE	IF	CITATIONS
73	Tropical Keratopathy (Florida Spots) in Cats. <i>Veterinary Pathology</i> , 2018, 55, 861-870.	1.7	7
74	Co-evolution of Carbon Oxides and Fluorides During the Electrowinning of Aluminium with Molten NaF-AlF ₃ -CaF ₂ -Al ₂ O ₃ Electrolytes. <i>Minerals, Metals and Materials Series</i> , 2017, , 533-539.	0.4	7
75	Using Proteomics, Immunohistology, and Atomic Force Microscopy To Characterize Surface Damage to Lambskins Observed after Enzymatic Dewooling. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 7934-7941.	5.2	6
76	Chemical techniques for pretreating and regenerating active slag filters for improved phosphorus removal. <i>Environmental Technology (United Kingdom)</i> , 2011, 32, 1053-1062.	2.2	6
77	A small angle X-ray scattering study of the structure and development of looseness in bovine hides and leather. <i>Journal of the Science of Food and Agriculture</i> , 2017, 97, 1543-1551.	3.5	6
78	Artificially modified collagen fibril orientation affects leather tear strength. <i>Journal of the Science of Food and Agriculture</i> , 2018, 98, 3524-3531.	3.5	6
79	<p>Bovine Meniscus Middle Zone Tissue: Measurement of Collagen Fibril Behavior During Compression</p>. <i>International Journal of Nanomedicine</i> , 2020, Volume 15, 5289-5298.	6.7	6
80	C K-edge NEXAFS study of fluorocarbon formation on carbon anodes in molten NaF-AlF ₃ -CaF ₂ . <i>Surface and Interface Analysis</i> , 2013, 45, 1854-1858.	1.8	5
81	Facilitating high-force single-polysaccharide stretching using covalent attachment of one end of the chain. <i>Carbohydrate Polymers</i> , 2012, 87, 806-815.	10.2	4
82	Age Differences with Glutaraldehyde Treatment in Collagen Fibril Orientation of Bovine Pericardium. <i>Journal of Biomaterials and Tissue Engineering</i> , 2016, 6, 992-997.	0.1	4
83	Collagen dehydration. <i>International Journal of Biological Macromolecules</i> , 2022, 216, 140-147.	7.5	4
84	Influence of Heat Transfer on Anode Reactions When Electrowinning Metal from Its Oxides Dissolved in Molten Fluorides. <i>Journal of the Electrochemical Society</i> , 2017, 164, H5108-H5118.	2.9	3
85	Measured collagen fibril response to arterial inflation using SAXS. <i>International Journal of Biological Macromolecules</i> , 2019, 137, 1020-1029.	7.5	3
86	Characterization of the Heavy Mineral Suite in a Holocene Beach Placer, Barrytown, New Zealand. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 86.	2.0	3
87	Controlled Hydrolysis of TiO ₂ from HCl Digestion Liquors of Ilmenite. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 6333-6342.	3.7	3
88	Nanotechnology Provides a New Perspective on Chemical Thermodynamics. <i>Journal of Chemical Education</i> , 2009, 86, 50.	2.3	2
89	Deer leather: analysis of the microstructure affecting pebble. <i>Journal of the Science of Food and Agriculture</i> , 2017, 97, 3509-3514.	3.5	2
90	Data on collagen structures in leather with varying moisture contents from small angle X-ray scattering and three point bend testing. <i>Data in Brief</i> , 2018, 21, 1220-1226.	1.0	2

#	ARTICLE	IF	CITATIONS
91	Reactivity of Coke in Relation to Sulfur Level and Microstructure. Minerals, Metals and Materials Series, 2019, , 1247-1253.	0.4	2
92	Manganese accumulation in probiotic Lactobacillus paracasei ATCC 55544 analyzed by synchrotron X-ray fluorescence microscopy and impact of accumulation on the bacterial viability following encapsulation. Food Research International, 2021, 147, 110528.	6.2	2
93	A new forceâ€extension formula for stretched macromolecules and polymers based on the Ising model. Physica A: Statistical Mechanics and Its Applications, 2016, 463, 467-474.	2.6	0
94	Cover Image, Volume 97, Issue 11. Journal of the Science of Food and Agriculture, 2017, 97, i-i.	3.5	0
95	Cover Image, Volume 97, Issue 5. Journal of the Science of Food and Agriculture, 2017, 97, i-i.	3.5	0
96	Facilitating Nanomechanical Measurements on Physisorbed Biopolymers with Automated On-the-Fly Monitoring of Single-Molecule Force Curves. Advanced Science Letters, 2011, 4, 3576-3579.	0.2	0
97	Fibril orientation and strength in collagen materials and adaptation to strain. Advanced Materials Letters, 2018, 9, 411-418.	0.6	0
98	An EXAFS and XANES Study of V, Ni, and Fe Speciation in Cokes for Anodes Used in Aluminum Production. Minerals, Metals and Materials Series, 2020, , 1327-1328.	0.4	0
99	Adhesive Properties of Tall Oil Pitch Modified Bitumen. Road Materials and Pavement Design, 2007, 8, 449-465.	4.0	0
100	Age Hardening Potential of Tall Oil Pitch Modified Bitumen. Road Materials and Pavement Design, 2007, 8, 467-481.	4.0	0