

George D Wignall

List of Publications by Year in descending order

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56
papers

4,609
citations

257450

24
h-index

233421

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60
all docs

60
docs citations

60
times ranked

4966
citing authors

#	ARTICLE	IF	CITATIONS
1	Alkanethiolate Gold Cluster Molecules with Core Diameters from 1.5 to 5.2 nm: Core and Monolayer Properties as a Function of Core Size. <i>Langmuir</i> , 1998, 14, 17-30.	3.5	1,750
2	Monolayers in Three Dimensions: NMR, SAXS, Thermal, and Electron Hopping Studies of Alkanethiol Stabilized Gold Clusters. <i>Journal of the American Chemical Society</i> , 1995, 117, 12537-12548.	13.7	831
3	Gaussian- to stretched-coil transition in block copolymer melts. <i>Physical Review Letters</i> , 1990, 65, 1112-1115.	7.8	203
4	Order and Disorder in Symmetric Diblock Copolymer Melts. <i>Macromolecules</i> , 1995, 28, 1429-1443.	4.8	193
5	The 40m general purpose small-angle neutron scattering instrument at Oak Ridge National Laboratory. <i>Journal of Applied Crystallography</i> , 2012, 45, 990-998.	4.5	89
6	Molecular weight scaling in critical polymer mixtures. <i>Physical Review Letters</i> , 1992, 68, 2452-2455.	7.8	87
7	The Bio-SANS instrument at the High Flux Isotope Reactor of Oak Ridge National Laboratory. <i>Journal of Applied Crystallography</i> , 2014, 47, 1238-1246.	4.5	83
8	New Phosphate Fluorosurfactants for Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2002, 124, 1834-1835.	13.7	81
9	Small-Angle Scattering Investigations of Poly(ϵ -caprolactone)/Polycarbonate Blends. 2. Small-Angle X-ray and Light Scattering Study of Semicrystalline/Semicrystalline and Semicrystalline/Amorphous Blend Morphologies. <i>Macromolecules</i> , 1994, 27, 2520-2528.	4.8	80
10	Structure of Phosphate Fluorosurfactant Based Reverse Micelles in Supercritical Carbon Dioxide. <i>Langmuir</i> , 2002, 18, 7371-7376.	3.5	78
11	Small-angle neutron scattering in materials science: Recent practical applications. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	76
12	Configuration of the polyisobutylene chain according to neutron and x-ray scattering. <i>Macromolecules</i> , 1983, 16, 1328-1335.	4.8	67
13	Effect of Tacticity on Coil Dimensions and Thermodynamic Properties of Polypropylene. <i>Macromolecules</i> , 2002, 35, 5061-5068.	4.8	59
14	Characterization of Lecithin-Taurodeoxycholate Mixed Micelles Using Small-Angle Neutron Scattering and Static and Dynamic Light Scattering. <i>The Journal of Physical Chemistry</i> , 1994, 98, 4402-4410.	2.9	55
15	Formation of ordered macropores and templated nanopores in silica sol-gel system incorporated with EO-PO-EO triblock copolymer. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001, 187-188, 117-122.	4.7	55
16	Phase Behavior of Isotactic Polypropylene-Poly(ethylene/ethylene) Random Copolymer Blends. <i>Macromolecules</i> , 1997, 30, 3650-3657.	4.8	50
17	A Study of the Influence of Lil on the Chain Conformations of Poly(ethylene oxide) in the Melt by Small-Angle Neutron Scattering and Molecular Dynamics Simulations. <i>Macromolecules</i> , 2000, 33, 7544-7548.	4.8	49
18	Microstructural Characterization of Adsorption and Depletion Regimes of Supercritical Fluids in Nanopores. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15736-15742.	3.1	47

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19	Synthesis and characterization of poly(vinylcyclohexane) derivatives. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1527-1536.	2.1	41
20	Small Angle Neutron Scattering Study of Conformation of Oligo(ethylene glycol)-Grafted Polystyrene in Dilute Solutions: Effect of the Backbone Length. Macromolecules, 2008, 41, 9831-9836.	4.8	38
21	Enhanced Miscibility of Low-Molecular-Weight Polystyrene/Polyisoprene Blends in Supercritical CO ₂ . Journal of Physical Chemistry B, 1999, 103, 5472-5476.	2.6	34
22	Comparison of Inter- and Intramolecular Correlations of Polystyrene in Poor and θ Solvents via Small-Angle Neutron Scattering. Macromolecules, 1998, 31, 8436-8438.	4.8	30
23	Self-Assembly of Phosphate Fluorosurfactants in Carbon Dioxide. Langmuir, 2004, 20, 1065-1072.	3.5	29
24	Model ABC Triblock Copolymers and Blends near the Order \rightarrow Disorder Transition. Macromolecules, 2002, 35, 3189-3197.	4.8	26
25	NMR and SANS Studies of Aggregation and Microemulsion Formation by Phosphorus Fluorosurfactants in Liquid and Supercritical Carbon Dioxide. Journal of Physical Chemistry B, 2005, 109, 10261-10269.	2.6	25
26	Neutron scattering studies of polymers in supercritical carbon dioxide. Journal of Physics Condensed Matter, 1999, 11, R157-R177.	1.8	22
27	Phase Behavior of Poly(methyl methacrylate)/Poly(vinylidene fluoride) Blends in the Presence of High-Pressure Carbon Dioxide. Macromolecular Chemistry and Physics, 2003, 204, 2064-2077.	2.2	22
28	Evaluation of the counterion distribution around spherical micelles in solution by small-angle neutron scattering. Physical Review E, 1996, 53, 1744-1752.	2.1	21
29	Association and Structure of Thermosensitive Comblike Block Copolymers in Aqueous Solutions. Macromolecules, 2008, 41, 4824-4827.	4.8	21
30	Neutron-Scattering Measurements of ϵ -Soft Matter. MRS Bulletin, 1999, 24, 34-39.	3.5	20
31	Ultra-Small-Angle Neutron Scattering Study of Colloidal Alloys. 1. Contrast Variation Experiments for Mixtures of Hydrogenated and Deuterated Polystyrene Latices in H ₂ O/D ₂ O. Langmuir, 1999, 15, 293-296.	3.5	20
32	Solution Properties of 1,3-Cyclohexadiene Polymers by Laser Light Scattering and Small-Angle Neutron Scattering. Macromolecules, 2006, 39, 897-899.	4.8	18
33	Small-Angle Scattering Study of Mesoscopic Structures in Charged Gel and Their Evolution on Dehydration. Journal of Physical Chemistry B, 2003, 107, 6300-6308.	2.6	16
34	A SANS study of the dimensions of polystyrene formed by freeze-drying from dilute solution. Macromolecules, 1990, 23, 683-685.	4.8	15
35	SANS Evidence of Liquid \rightarrow Liquid Phase Separation Leading to Inversion of Crystallization Rate of Broadly Distributed Random Ethylene Copolymers. Macromolecules, 2017, 50, 4406-4414.	4.8	15
36	Phase Behavior of Poly(methyl methacrylate)/Poly(vinylidene fluoride) Blends with and without High-Pressure CO ₂ . Macromolecules, 2003, 36, 4245-4249.	4.8	14

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37	Conformation of oligo(ethylene glycol) grafted polystyrene in dilute aqueous solutions. <i>Polymer</i> , 2007, 48, 4108-4113.	3.8	13
38	The glass transition and the glassy state. , 2004, , 72-152.		11
39	Conformation of oligo(ethylene glycol) grafted poly(norbornene) in solutions: A small angle neutron scattering study. <i>European Polymer Journal</i> , 2008, 44, 2859-2864.	5.4	11
40	Corrections for the geometric distortion of the tube detectors on SANS instruments at ORNL. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 775, 63-70.	1.6	10
41	Small-angle neutron scattering from symmetric blends of poly(dimethylsiloxane) and poly(ethylmethylsiloxane). <i>Polymer</i> , 2004, 45, 7969-7977.	3.8	9
42	The structure of colloidal alloy crystals revealed by ultra-small-angle neutron scattering. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001, 190, 17-24.	4.7	7
43	Applications of neutron scattering to soft condensed matter. Edited by Barbara J. Gabrys. Pp. xii + 362. New York: Gordon and Breach Science Publishers, 2000. Price US\$95, £63, EUR€105, ISBN 90-5699-300-3.. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2002, 58, 304-304.	0.3	7
44	Small Angle Neutron and X-Ray Scattering. , 2007, , 407-420.		7
45	Liquid-liquid demixing from polystyrene solutions. Studies on temperature and pressure dependences using dynamic light scattering and neutron scattering. <i>Fluid Phase Equilibria</i> , 1998, 150-151, 687-694.	2.5	6
46	Small-Angle neutron scattering facilities and polymer research at Oak Ridge. <i>Polymer Engineering and Science</i> , 1986, 26, 695-700.	3.1	5
47	Small-angle-neutron-scattering characterization of polymers. , 2004, , 424-512.		3
48	The crystalline state. , 2004, , 209-315.		2
49	The mesomorphic state. , 2004, , 316-380.		2
50	Small Angle Neutron Scattering from Polymers in Supercritical Carbon Dioxide. , 2002, , 45-53.		1
51	The rubber elastic state. , 2004, , 3-71.		1
52	Viscoelasticity and flow in polymeric liquids. , 2004, , 153-208.		1
53	Morphology of a Blend of Zinc Neutralized Sulfonated Poly(Phenylene Oxide) or Polystyrene and an Amino Silicone. <i>Materials Research Society Symposia Proceedings</i> , 1996, 461, 25.	0.1	0
54	Xlth International Conference on Small-Angle Scattering. <i>Journal of Applied Crystallography</i> , 2000, 33, 0-0.	4.5	0

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55	The application of molecular spectroscopy to characterization of polymers. , 2004, , 383-423.		0
56	Combined Small-Angle Neutron and X-Ray Scattering Studies of Polymers. , 1993, , 355-372.		0