

Alex C Hannon

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/437504/publications.pdf>

Version: 2024-02-01

132
papers

4,015
citations

109321

35
h-index

144013

57
g-index

138
all docs

138
docs citations

138
times ranked

3594
citing authors

#	ARTICLE	IF	CITATIONS
1	Lead silicate glass structure: New insights from diffraction and modeling of probable lone pair locations. Journal of the American Ceramic Society, 2022, 105, 938-957.	3.8	5
2	Structural origin of the weak germanate anomaly in lead germanate glass properties. Journal of the American Ceramic Society, 2022, 105, 1010-1030.	3.8	2
3	Structure of binary antimony phosphate glasses by diffraction methods. Journal of Non-Crystalline Solids, 2022, 583, 121476.	3.1	2
4	Unexpected role of metal halides in a chalcogenide glass network. Materials and Design, 2022, 216, 110547.	7.0	1
5	Preparation and Structure of the Ion-Conducting Mixed Molecular Glass $Ga_2I_{3.17}$. Inorganic Chemistry, 2021, 60, 6319-6326.	4.0	2
6	The structure of sodium silicate glass from neutron diffraction and modeling of oxygen-oxygen correlations. Journal of the American Ceramic Society, 2021, 104, 6155.	3.8	4
7	Structural units of binary vanadate glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2021, 572, 121120.	3.1	10
8	Structure of silver molybdate glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2021, 573, 121143.	3.1	2
9	Neutron diffraction investigation of copper tellurite glasses with high real-space resolution. Journal of Applied Crystallography, 2021, 54, .	4.5	1
10	Chemical and Structural Variety in Sodium Thioarsenate Glasses Studied by Neutron Diffraction and Supported by First-Principles Simulations. Inorganic Chemistry, 2020, 59, 16410-16420.	4.0	12
11	Analysis of Physical and Structural Properties of Alkali Oxide-Modified Tellurite Glasses. Journal of Undergraduate Reports in Physics, 2020, 30, 100003.	0.1	1
12	MAS-NMR studies of carbonate retention in a very wide range of Na_2O-SiO_2 glasses. Journal of Non-Crystalline Solids, 2020, 534, 119958.	3.1	6
13	Neutron Diffraction and Raman Studies of the Incorporation of Sulfate in Silicate Glasses. Journal of Physical Chemistry C, 2020, 124, 5409-5424.	3.1	20
14	Structure and properties of densified silica glass: characterizing the order within disorder. NPC Asia Materials, 2020, 12, .	7.9	57
15	Free volume distribution and structural inhomogeneity in Ni ₅₀ V ₅₀ amorphous alloy. Journal of Alloys and Compounds, 2019, 770, 350-355.	5.5	8
16	Dimeric Molecular Structure of Molten Gallium Trichloride and a Hidden Evolution toward a Possible Liquid-Liquid Transition. Journal of Physical Chemistry B, 2019, 123, 10260-10266.	2.6	3
17	Lattice dynamics and negative thermal expansion in the framework compound $ZnNi_2Mo_4O_{20}$ with two-dimensional and three-dimensional local environments. Physical Review B, 2019, 99, .	2.6	26
18	In vitro cellular testing of strontium/calcium substituted phosphate glass discs and microspheres shows potential for bone regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 396-405.	2.7	18

#	ARTICLE	IF	CITATIONS
19	Bent HgI ₂ Molecules in the Melt and Sulfide Glasses: Implications for Nonlinear Optics. Chemistry of Materials, 2019, 31, 4103-4112.	6.7	13
20	Structure of tin phosphate glasses by neutron and X-ray diffraction. Journal of Non-Crystalline Solids: X, 2019, 2, 100017.	1.2	1
21	The structure and properties of xZnO-(67-x)SnO-33P2O5 glasses: (II) Diffraction, NMR, and chromatographic studies. Journal of Non-Crystalline Solids, 2018, 492, 68-76.	3.1	12
22	Structural Differences between the Glass and Crystal Forms of the Transparent Ferroelectric Nanocomposite, LaBGeO ₅ , from Neutron Diffraction and NMR Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 20963-20980.	3.1	10
23	Neutron scattering length determination by means of total scattering. Journal of Applied Crystallography, 2018, 51, 854-866.	4.5	3
24	Atomic structure of Mg-based metallic glasses from molecular dynamics and neutron diffraction. Physical Chemistry Chemical Physics, 2017, 19, 8504-8515.	2.8	21
25	Structure of rare-earth chalcogenide glasses by neutron and x-ray diffraction. Journal of Physics Condensed Matter, 2017, 29, 225703.	1.8	5
26	The Germanate Anomaly in Alkaline Earth Germanate Glasses. Journal of Physical Chemistry C, 2017, 121, 9462-9479.	3.1	26
27	Structural Disorder in (Bi, M) ₂ (Fe, Mn, Bi) ₂ O _{6+x} (M = Na or K) Pyrochlores Seen from Reverse Monte Carlo Analysis of Neutron Total Scattering. Journal of Physical Chemistry C, 2017, 121, 18120-18128.	3.1	1
28	Atomic structure of chlorine containing calcium silicate glasses by neutron diffraction and ²⁹ Si solid-state NMR. International Journal of Applied Glass Science, 2017, 8, 383-390.	2.0	8
29	Structural and physico-chemical analysis of calcium/strontium substituted, near-invert phosphate based glasses for biomedical applications. Acta Biomaterialia, 2017, 60, 109-127.	8.3	26
30	Topological Ordering and Viscosity in the Glass-Forming Ge-Se System: The Search for a Structural or Dynamical Signature of the Intermediate Phase. Frontiers in Materials, 2017, 4, .	2.4	28
31	Neutron Diffraction, Theory. , 2017, , 88-97.		2
32	Bonding and structure in network glasses. Journal of Non-Crystalline Solids, 2016, 451, 56-67.	3.1	26
33	How the Surface Structure Determines the Properties of CuH. Inorganic Chemistry, 2015, 54, 2213-2220.	4.0	27
34	Alkali environments in tellurite glasses. Journal of Non-Crystalline Solids, 2015, 414, 33-41.	3.1	25
35	Metastable (Bi, M) ₂ (Fe, Mn, Bi) ₂ O _{6+x} (M = Na or K) Pyrochlores from Hydrothermal Synthesis. Inorganic Chemistry, 2014, 53, 13197-13206.	4.0	20
36	Structure of Na ₂ O-GeO ₂ -P ₂ O ₅ glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2014, 390, 59-69.	3.1	14

#	ARTICLE	IF	CITATIONS
37	Investigation of some new hydro(solvo)thermal synthesis routes to nanostructured mixed-metal oxides. <i>Journal of Solid State Chemistry</i> , 2014, 214, 30-37.	2.9	8
38	On the germanium oxygen coordination number in lead germanate glasses. <i>Journal of Non-Crystalline Solids</i> , 2014, 386, 56-60.	3.1	18
39	Characterization of Structural Disorder in Ga_2O_3 . <i>Journal of Physical Chemistry C</i> , 2014, 118, 16188-16198.	3.1	107
40	Lone-pair distribution and plumbite network formation in high lead silicate glass, $80\text{PbO}\cdot 20\text{SiO}_2$. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8506.	2.8	31
41	Local and Average Structure in Zinc Cyanide: Toward an Understanding of the Atomistic Origin of Negative Thermal Expansion. <i>Journal of the American Chemical Society</i> , 2013, 135, 16478-16489.	13.7	44
42	Structures of Uncharacterised Polymorphs of Gallium Oxide from Total Neutron Diffraction. <i>Chemistry - A European Journal</i> , 2013, 19, 2803-2813.	3.3	316
43	Structural Modeling of Dahlia-Type Single-Walled Carbon Nanohorn Aggregates by Molecular Dynamics. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9057-9061.	2.5	17
44	Drastic Connectivity Change in High Refractive Index Lanthanum Niobate Glasses. <i>Chemistry of Materials</i> , 2013, 25, 3056-3061.	6.7	48
45	Terminal Oxygens in Amorphous TeO_2 . <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2312-2316.	4.6	88
46	Total neutron scattering investigation of the structure of a cobalt gallium oxide spinel prepared by solvothermal oxidation of gallium metal. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 454212.	1.8	7
47	Structure of $\text{V}_2\text{O}_5\cdot\text{P}_2\text{O}_5$ glasses by X-ray and neutron diffraction. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 328-336.	3.1	22
48	Mixed Copper, Silver, and Gold Cyanides, $(\text{M}^2\text{CN})_x$: Tailoring Chain Structures To Influence Physical Properties. <i>Journal of the American Chemical Society</i> , 2012, 134, 16387-16400.	13.7	50
49	Structures of $\text{Pd}(\text{CN})_2$ and $\text{Pt}(\text{CN})_2$: Intrinsically Nanocrystalline Materials?. <i>Inorganic Chemistry</i> , 2011, 50, 104-113.	4.0	18
50	Influence of Lone-Pair Cations on the Germanate Anomaly in Glass. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14997-15007.	3.1	9
51	Structural Characterization and Redox Catalytic Properties of Cerium(IV) Pyrochlore Oxides. <i>Chemistry of Materials</i> , 2011, 23, 5464-5473.	6.7	12
52	A neutron and X-ray diffraction study of $\text{Ca}\cdot\text{Mg}\cdot\text{Cu}$ metallic glasses. <i>Intermetallics</i> , 2011, 19, 860-870.	3.9	15
53	Reverse Monte Carlo modeling of atomic configuration for $\text{Li}_2\text{S}\cdot\text{P}_2\text{S}_5$ superionic glasses. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 18, 022012.	0.6	1
54	A pulsed neutron diffraction study of the topological defects presence in carbon nanohorns. <i>Chemical Physics Letters</i> , 2011, 502, 87-91.	2.6	21

#	ARTICLE	IF	CITATIONS
55	Crystal Structure of Li ₇ P ₃ S ₁₁ Studied by Neutron and Synchrotron X-ray Powder Diffraction. Journal of the Physical Society of Japan, 2010, 79, 87-89.	1.6	29
56	Rearrangement of the structure during nucleation of a cordierite glass doped with TiO ₂ . Journal of Physics Condensed Matter, 2010, 22, 185401.	1.8	13
57	Characterization of Hydrous Palladium Oxide: Implications for Low-Temperature Carbon Monoxide Oxidation. Journal of Physical Chemistry C, 2010, 114, 14164-14172.	3.1	34
58	Nanocrystalline Cerium-Bismuth Oxides: Synthesis, Structural Characterization, and Redox Properties. Chemistry of Materials, 2010, 22, 6191-6201.	6.7	39
59	The effect of zinc and titanium on the structure of calcium-sodium phosphate based glass. Journal of Non-Crystalline Solids, 2010, 356, 1319-1324.	3.1	23
60	A neutron diffraction and ²⁰⁵ Tl NMR study of the thallium germanate glass system. Journal of Non-Crystalline Solids, 2010, 356, 2517-2523.	3.1	2
61	Structures and negative thermal expansion properties of the one-dimensional cyanides, CuCN, AgCN and AuCN. Zeitschrift für Kristallographie, 2010, 225, .	1.1	31
62	Aperiodicity, structure, and dynamics in Ni(CN) ₂ . Physical Review B, 2009, 80, .	3.2	30
63	Pressure-induced suppression of the polar distortion of liquid As and Ge . Physical Review B, 2009, 80. Physical Review B, 2009, 80.	3.2	16
64	Environment of titanium and aluminum in a magnesium aluminosilicate glass. Journal of Physics Condensed Matter, 2009, 21, 375107.	1.8	22
65	Establishing the structure of GeS ₂ at high pressures and temperatures: a combined approach using x-ray and neutron diffraction. Journal of Physics Condensed Matter, 2009, 21, 474217.	1.8	59
66	Local structure and disorder in crystalline Pb ₉ Al ₈ O ₂₁ . Journal of Solid State Chemistry, 2008, 181, 1087-1102.	2.9	11
67	Structure and thermal properties of yttrium aluminophosphate glasses. Journal of Physics Condensed Matter, 2008, 20, 115204.	1.8	17
68	Structural analysis of xCsCl(1-x)Ga ₂ S ₃ glasses. Journal of Non-Crystalline Solids, 2008, 354, 134-137.	3.1	7
69	Structure of potassium germanophosphate glasses by X-ray and neutron diffraction. Part 1: Short-range order. Journal of Non-Crystalline Solids, 2008, 354, 3572-3579.	3.1	9
70	Structure of titanophosphate glasses studied by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2007, 353, 1802-1807.	3.1	11
71	Structural studies of lead aluminate glasses. Journal of Non-Crystalline Solids, 2007, 353, 1741-1747.	3.1	19
72	A model for the Ge-O coordination in germanate glasses. Journal of Non-Crystalline Solids, 2007, 353, 1688-1694.	3.1	40

#	ARTICLE	IF	CITATIONS
73	Ge ^{IV} O Coordination in Cesium Germanate Glasses. <i>Journal of Physical Chemistry B</i> , 2007, 111, 3342-3354.	2.6	44
74	Surprises from a Simple Material—The Structure and Properties of Nickel Cyanide. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 7116-7118.	13.8	83
75	Structure of a potassium germanophosphate glass by x-ray and neutron diffraction. <i>Solid State Communications</i> , 2007, 143, 403-407.	1.9	6
76	Direct observation of R ³⁺ distances in rare-earth(R)phosphate glasses by magnetic difference neutron diffraction. <i>Physical Review B</i> , 2006, 73, .	3.2	22
77	Energy relaxation and pulsed neutrons diffraction studies of carbon nanotubes. <i>Diamond and Related Materials</i> , 2006, 15, 1090-1093.	3.9	2
78	Voronoi analysis of the structure of Cu ²⁺ Zr and Ni ²⁺ Zr metallic glasses. <i>Intermetallics</i> , 2006, 14, 893-897.	3.9	108
79	Molecular dynamics simulations of calcium aluminate glasses. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 725-736.	3.1	47
80	Molecular dynamics simulation of carbon nanotube structure. <i>Journal of Molecular Structure</i> , 2006, 792-793, 78-81.	3.6	10
81	Results on disordered materials from the GEneral Materials diffractometer, GEM, at ISIS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 551, 88-107.	1.6	235
82	Structure of zinc phosphate glasses probed by neutron and X-ray diffraction of high resolving power and by reverse Monte Carlo simulations. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 1020-1031.	3.1	33
83	Complementary studies of structural characteristics for carbon materials with X-rays and neutrons. <i>Journal of Alloys and Compounds</i> , 2005, 401, 18-23.	5.5	8
84	Structure of rare-earth phosphate glasses by X-ray and neutron diffraction. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 3179-3190.	3.1	33
85	Radial distribution function analysis of spatial atomic correlations in carbon nanotubes. <i>Diamond and Related Materials</i> , 2004, 13, 1261-1265.	3.9	22
86	The role of Sb ⁵⁺ in the structure of Sb ₂ O ₃ –B ₂ O ₃ binary glasses—an NMR and Mössbauer spectroscopy study. <i>Solid State Nuclear Magnetic Resonance</i> , 2004, 26, 172-179.	2.3	47
87	Local Order of Amorphous Zeolite Precursors from ²⁹ Si{H} CPMAS and ²⁷ Al and ²³ Na MQMAS NMR and Evidence for the Nature of Medium-Range Order from Neutron Diffraction. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8208-8217.	2.6	41
88	Model-based computation of powder diffraction patterns for carbon nanotubes. <i>Diamond and Related Materials</i> , 2004, 13, 1218-1221.	3.9	11
89	Structure of AuCN Determined from Total Neutron Diffraction. <i>Inorganic Chemistry</i> , 2003, 42, 4724-4730.	4.0	56
90	Structural Investigation of Silicon Carbonitride Glasses by Neutron Diffraction. <i>Materials Science Forum</i> , 2002, 386-388, 365-370.	0.3	3

#	ARTICLE	IF	CITATIONS
91	Beyond Bragg Scattering: The Structure of AgCN Determined from Total Neutron Diffraction. Inorganic Chemistry, 2002, 41, 1042-1044.	4.0	58
92	CuCN: A Polymorphic Material. Structure of One Form Determined from Total Neutron Diffraction. Inorganic Chemistry, 2002, 41, 4990-4992.	4.0	56
93	Structure of vanadium tellurite glasses studied by neutron and X-ray diffraction. Solid State Communications, 2002, 123, 273-278.	1.9	45
94	Ion transport regimes in chalcogenide and chalcogen halide glasses: from the host to the cation-related network connectivity. Solid State Ionics, 2002, 154-155, 349-359.	2.7	39
95	The structure of vitreous boron sulphide. Journal of Non-Crystalline Solids, 2001, 293-295, 383-388.	3.1	7
96	Intermediate range structure and low-energy dynamics of densified vitreous silica. Journal of Non-Crystalline Solids, 2001, 293-295, 389-393.	3.1	77
97	The structure of pressure-compacted vitreous germania. Journal of Non-Crystalline Solids, 2001, 293-295, 769-775.	3.1	41
98	Continuous random network models of Cu-As-Te glasses. Physica B: Condensed Matter, 2000, 276-278, 463-464.	2.7	6
99	The structure of aluminate glasses by neutron diffraction. Journal of Non-Crystalline Solids, 2000, 274, 102-109.	3.1	81
100	The structure of potassium germanate glasses a combined X-ray and neutron scattering study. Journal of Non-Crystalline Solids, 2000, 278, 99-114.	3.1	28
101	Neutron Diffraction Studies of Graphite Potassium Methylamine: Staging Transitions and Structure of New Graphite Intercalation Compounds. Journal of Physical Chemistry B, 2000, 104, 10969-10972.	2.6	7
102	Neutron Diffraction, Theory*. , 1999, , 1779-1789.		0
103	Pulsed neutron diffraction from GeS ₂ -based sulphide glasses. Journal of Physics and Chemistry of Solids, 1999, 60, 1473-1477.	4.0	2
104	Novel existence of collective propagating mode and strongly localized mode in vitreous silica. Physica B: Condensed Matter, 1999, 263-264, 268-272.	2.7	24
105	Peculiar suppression of the specific heat and boson peak intensity of densified SiO ₂ glass. Physica B: Condensed Matter, 1999, 263-264, 299-302.	2.7	56
106	Neutron scattering study of bulk amorphous GaSb. Journal of Non-Crystalline Solids, 1999, 244, 250-259.	3.1	15
107	The change of the Ge-O coordination number in potassium germanate glasses probed by neutron diffraction with high real-space resolution. Journal of Non-Crystalline Solids, 1999, 248, 1-10.	3.1	49
108	Neutron diffraction studies of the structure of Ge-based multicomponent sulphide glasses. Journal of Non-Crystalline Solids, 1999, 256-257, 73-77.	3.1	12

#	ARTICLE	IF	CITATIONS
109	High-temperature structure of $K_2O\text{-}TeO_2$ glasses. <i>Journal of Non-Crystalline Solids</i> , 1999, 256-257, 111-118.	3.1	38
110	LAD, 1982 - 1998: the first ISIS diffractometer. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 9127-9138.	1.8	16
111	Neutron diffraction analysis of the atomic short range order in lead gallate glasses. <i>Journal of Non-Crystalline Solids</i> , 1998, 232-234, 51-58.	3.1	22
112	The structure of tin silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1998, 232-234, 300-308.	3.1	41
113	Amorphous MoS_3 : clusters or chains? The structural evidence. <i>Journal of Non-Crystalline Solids</i> , 1998, 232-234, 434-439.	3.1	30
114	A neutron and X-ray diffraction study of the structure of the LaP_3O_9 glass. <i>Journal of Non-Crystalline Solids</i> , 1998, 232-234, 44-50.	3.1	49
115	Floppy Modes in Crystalline and Amorphous Silicates. <i>Physical Review Letters</i> , 1997, 78, 1070-1073.	7.8	123
116	Neutron and X-ray Diffraction Study on the Structure of Ultraphosphate Glasses. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1997, 52, 259-269.	1.5	29
117	The True Structure and Metal-Metal-Bonded Framework of $LiMg_3O_2$ Determined from Total Neutron Scattering. <i>Inorganic Chemistry</i> , 1997, 36, 1749-1753.	4.0	17
118	Direct measurement of the Si-O bond length and orientational disorder in the high-temperature phase of cristobalite. <i>Physics and Chemistry of Minerals</i> , 1997, 24, 311-317.	0.8	99
119	Structure of $Cu\text{-}As\text{-}Te$ glasses - Neutron diffraction and reverse Monte Carlo simulations. <i>Physica B: Condensed Matter</i> , 1997, 234-236, 424-425.	2.7	5
120	Effect of copper on the structure and other physical properties of $Cu\text{-}As\text{-}Te$ chalcogenide glasses. <i>Journal of Physics and Chemistry of Solids</i> , 1997, 58, 1625-1630.	4.0	9
121	The effect of composition in lead gallate glasses: a structural study. <i>Journal of Non-Crystalline Solids</i> , 1996, 196, 187-192.	3.1	29
122	Alkali silicate glasses: interpreting neutron diffraction results using the molecular dynamics simulation technique. <i>Journal of Non-Crystalline Solids</i> , 1996, 196, 233-238.	3.1	29
123	Short-Range Order in KPO_3 Glass Studied by Neutron and X-Ray Diffraction. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1996, 51, 179-186.	1.5	28
124	Phonon anomaly of under-doped $YBa_2Cu_3O_{6.6}$ studied by neutron scattering. <i>Physica B: Condensed Matter</i> , 1996, 219-220, 204-206.	2.7	0
125	Investigation on permanently densified vitreous silica by means of neutron scattering. <i>Physica B: Condensed Matter</i> , 1996, 219-220, 287-289.	2.7	11
126	Short-Range Order Details of Metaphosphate Glasses Studied by Pulsed Neutron Scattering. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1995, 50, 684-692.	1.5	14

#	ARTICLE	IF	CITATIONS
127	Neutron scattering from PbOGeO ₂ glasses. <i>Physica B: Condensed Matter</i> , 1995, 213-214, 490-492.	2.7	36
128	Boroxol groups in vitreous boron oxide: new evidence from neutron diffraction and inelastic neutron scattering studies. <i>Journal of Non-Crystalline Solids</i> , 1994, 177, 299-316.	3.1	144
129	An inelastic neutron scattering study of the dynamics of hydrogenated and deuterated amorphous silicon. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 201, 395-401.	2.6	4
130	The structure of alkali silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1992, 150, 97-102.	3.1	72
131	A dynamic correlation function for amorphous solids. <i>Journal of Non-Crystalline Solids</i> , 1992, 150, 239-244.	3.1	33
132	The atomic and magnetic structure of melt-spun amorphous Dy ₇ Ni ₃ . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 134, 883-887.	5.6	17