## Alex C Hannon

## List of Publications by Year in descending order

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109321 144013 4,015 132 35 57 citations h-index g-index papers 138 138 138 3594 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Structures of Uncharacterised Polymorphs of Gallium Oxide from Total Neutron Diffraction. Chemistry - A European Journal, 2013, 19, 2803-2813.	3.3	316
2	Results on disordered materials from the GEneral Materials diffractometer, GEM, at ISIS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 551, 88-107.	1.6	235
3	Boroxol groups in vitreous boron oxide: new evidence from neutron diffraction and inelastic neutron scattering studies. Journal of Non-Crystalline Solids, 1994, 177, 299-316.	3.1	144
4	Floppy Modes in Crystalline and Amorphous Silicates. Physical Review Letters, 1997, 78, 1070-1073.	7.8	123
5	Voronoi analysis of the structure of Cu–Zr and Ni–Zr metallic glasses. Intermetallics, 2006, 14, 893-897.	3.9	108
6	Characterization of Structural Disorder in $\hat{1}^3$ -Ga <sub>2</sub> O <sub>3</sub> . Journal of Physical Chemistry C, 2014, 118, 16188-16198.	3.1	107
7	Direct measurement of the Si-O bond length and orientational disorder in the high-temperature phase of cristobalite. Physics and Chemistry of Minerals, 1997, 24, 311-317.	0.8	99
8	Terminal Oxygens in Amorphous TeO <sub>2</sub> . Journal of Physical Chemistry Letters, 2013, 4, 2312-2316.	4.6	88
9	Surprises from a Simple Materialâ€"The Structure and Properties of Nickel Cyanide. Angewandte Chemie - International Edition, 2007, 46, 7116-7118.	13.8	83
10	The structure of aluminate glasses by neutron diffraction. Journal of Non-Crystalline Solids, 2000, 274, 102-109.	3.1	81
11	Intermediate range structure and low-energy dynamics of densified vitreous silica. Journal of Non-Crystalline Solids, 2001, 293-295, 389-393.	3.1	77
12	The structure of alkali silicate glasses. Journal of Non-Crystalline Solids, 1992, 150, 97-102.	3.1	72
13	Establishing the structure of GeS <sub>2</sub> 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
14	Beyond Bragg Scattering:Â The Structure of AgCN Determined from Total Neutron Diffraction. Inorganic Chemistry, 2002, 41, 1042-1044.	4.0	58
15	Structure and properties of densified silica glass: characterizing the order within disorder. NPG Asia Materials, 2020, 12, .	7.9	57
16	Peculiar suppression of the specific heat and boson peak intensity of densified SiO2 glass. Physica B: Condensed Matter, 1999, 263-264, 299-302.	2.7	56
17	CuCN:  A Polymorphic Material. Structure of One Form Determined from Total Neutron Diffraction. Inorganic Chemistry, 2002, 41, 4990-4992.	4.0	56
18	Structure of AuCN Determined from Total Neutron Diffraction. Inorganic Chemistry, 2003, 42, 4724-4730.	4.0	56

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19	Mixed Copper, Silver, and Gold Cyanides, (M <sub><i>x</i></sub> M′ <sub>1–<i>x</i></sub> )CN: Tailoring Chain Structures To Influence Physical Properties. Journal of the American Chemical Society, 2012, 134, 16387-16400.	13.7	50
20	A neutron and X-ray diffraction study of the structure of the LaP3O9 glass. Journal of Non-Crystalline Solids, 1998, 232-234, 44-50.	3.1	49
21	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
22	Drastic Connectivity Change in High Refractive Index Lanthanum Niobate Glasses. Chemistry of Materials, 2013, 25, 3056-3061.	6.7	48
23	The role of Sb5+ in the structure of Sb2O3–B2O3 binary glasses—an NMR and Mössbauer spectroscopy study. Solid State Nuclear Magnetic Resonance, 2004, 26, 172-179.	2.3	47
24	Molecular dynamics simulations of calcium aluminate glasses. Journal of Non-Crystalline Solids, 2006, 352, 725-736.	3.1	47
25	Structure of vanadium tellurite glasses studied by neutron and X-ray diffraction. Solid State Communications, 2002, 123, 273-278.	1.9	45
26	Geâ^'O Coordination in Cesium Germanate Glasses. Journal of Physical Chemistry B, 2007, 111, 3342-3354.	2.6	44
27	Local and Average Structure in Zinc Cyanide: Toward an Understanding of the Atomistic Origin of Negative Thermal Expansion. Journal of the American Chemical Society, 2013, 135, 16478-16489.	13.7	44
28	The structure of tin silicate glasses. Journal of Non-Crystalline Solids, 1998, 232-234, 300-308.	3.1	41
29	The structure of pressure-compacted vitreous germania. Journal of Non-Crystalline Solids, 2001, 293-295, 769-775.	3.1	41
30	Local Order of Amorphous Zeolite Precursors from 29Si{H} CPMAS and 27Al and 23Na MQMAS NMR and Evidence for the Nature of Medium-Range Order from Neutron Diffraction. Journal of Physical Chemistry B, 2004, 108, 8208-8217.	2.6	41
31	A model for the Ge–O coordination in germanate glasses. Journal of Non-Crystalline Solids, 2007, 353, 1688-1694.	3.1	40
32	lon transport regimes in chalcogenide and chalcohalide glasses: from the host to the cation-related network connectivity. Solid State Ionics, 2002, 154-155, 349-359.	2.7	39
33	Nanocrystalline Ceriumâ^'Bismuth Oxides: Synthesis, Structural Characterization, and Redox Properties. Chemistry of Materials, 2010, 22, 6191-6201.	6.7	39
34	High-temperature structure of K2O–TeO2 glasses. Journal of Non-Crystalline Solids, 1999, 256-257, 111-118.	3.1	38
35	Neutron scattering from PbOGeO2 glasses. Physica B: Condensed Matter, 1995, 213-214, 490-492.	2.7	36
36	Characterization of Hydrous Palladium Oxide: Implications for Low-Temperature Carbon Monoxide Oxidation. Journal of Physical Chemistry C, 2010, 114, 14164-14172.	3.1	34

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37	A dynamic correlation function for amorphous solids. Journal of Non-Crystalline Solids, 1992, 150, 239-244.	3.1	33
38	Structure of zinc phosphate glasses probed by neutron and X-ray diffraction of high resolving power and by reverse Monte Carlo simulations. Journal of Non-Crystalline Solids, 2005, 351, 1020-1031.	3.1	33
39	Structure of rare-earth phosphate glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2005, 351, 3179-3190.	3.1	33
40	Structures and negative thermal expansion properties of the one-dimensional cyanides, CuCN, AgCN and AuCN. Zeitschrift FÃ $^1\!4$ r Kristallographie, 2010, 225, .	1.1	31
41	Lone-pair distribution and plumbite network formation in high lead silicate glass, 80PbO·20SiO2. Physical Chemistry Chemical Physics, 2013, 15, 8506.	2.8	31
42	Amorphous MoS3: clusters or chains? The structural evidence. Journal of Non-Crystalline Solids, 1998, 232-234, 434-439.	3.1	30
43	Aperiodicity, structure, and dynamics inNi(CN)2. Physical Review B, 2009, 80, .	3.2	30
44	The effect of composition in lead gallate glasses: a structural study. Journal of Non-Crystalline Solids, 1996, 196, 187-192.	3.1	29
45	Alkali silicate glasses: interpreting neutron diffraction results using the molecular dynamics simulation technique. Journal of Non-Crystalline Solids, 1996, 196, 233-238.	3.1	29
46	Neutron and X-ray Diffraction Study on the Structure of Ultraphosphate Glasses. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1997, 52, 259-269.	1.5	29
47	Crystal Structure of Li7P3S11Studied by Neutron and Synchrotron X-ray Powder Diffraction. Journal of the Physical Society of Japan, 2010, 79, 87-89.	1.6	29
48	Short-Range Order in KPO <sub>3</sub> Glass Studied by Neutron and X-Ray Diffraction. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1996, 51, 179-186.	1.5	28
49	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
50	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
51	How the Surface Structure Determines the Properties of CuH. Inorganic Chemistry, 2015, 54, 2213-2220.	4.0	27
52	Bonding and structure in network glasses. Journal of Non-Crystalline Solids, 2016, 451, 56-67.	3.1	26
53	The Germanate Anomaly in Alkaline Earth Germanate Glasses. Journal of Physical Chemistry C, 2017, 121, 9462-9479.	3.1	26
54	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

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55	Lattice dynamics and negative thermal expansion in the framework compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ZnNi</mml:mi><mml:msub><with .<="" 2019,="" 99,="" and="" b,="" environments.="" local="" physical="" review="" th="" three-dimensional="" two-dimensional=""><th>mml:m<b>8.2</b>w&gt;&lt;1</th><th>mr<b>zl</b>6mo&gt;(&lt; r</th></with></mml:msub></mml:mrow></mml:math>	mml:m <b>8.2</b> w><1	mr <b>zl</b> 6mo>(< r
56	Alkali environments in tellurite glasses. Journal of Non-Crystalline Solids, 2015, 414, 33-41.	3.1	25
57	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
58	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
59	Neutron diffraction analysis of the atomic short range order in lead gallate glasses. Journal of Non-Crystalline Solids, 1998, 232-234, 51-58.	3.1	22
60	Radial distribution function analysis of spatial atomic correlations in carbon nanotubes. Diamond and Related Materials, 2004, 13, 1261-1265.	3.9	22
61	Direct observation ofR…Rdistances in rare-earth(R)phosphate glasses by magnetic difference neutron diffraction. Physical Review B, 2006, 73, .	3.2	22
62	Environment of titanium and aluminum in a magnesium alumino-silicate glass. Journal of Physics Condensed Matter, 2009, 21, 375107.	1.8	22
63	Structure of V2O5–P2O5 glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2012, 358, 328-336.	3.1	22
64	A pulsed neutron diffraction study of the topological defects presence in carbon nanohorns. Chemical Physics Letters, 2011, 502, 87-91.	2.6	21
65	Atomic structure of Mg-based metallic glasses from molecular dynamics and neutron diffraction. Physical Chemistry Chemical Physics, 2017, 19, 8504-8515.	2.8	21
66	Metastable (Bi, M) $<$ sub $>$ 2 $<$ /sub $>$ (Fe, Mn, Bi) $<$ sub $>$ 2 $<$ /sub $>$ 0 $<$ sub $>$ 6+ $<$ i $>×<$ /i> $>$ 6+ $<$ i $>×<$ /ii> $>$ 6+ $<$ 13206.	4.0	20
67	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
68	Structural studies of lead aluminate glasses. Journal of Non-Crystalline Solids, 2007, 353, 1741-1747.	3.1	19
69	Structures of Pd(CN) <sub>2</sub> and Pt(CN) <sub>2</sub> : Intrinsically Nanocrystalline Materials?. Inorganic Chemistry, 2011, 50, 104-113.	4.0	18
70	On the germanium–oxygen coordination number in lead germanate glasses. Journal of Non-Crystalline Solids, 2014, 386, 56-60.	3.1	18
71	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
72	The atomic and magnetic structure of melt-spun amorphous Dy7Ni3. Materials Science & Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 134, 883-887.	5.6	17

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73	The True Structure and Metalâ^'Metal-Bonded Framework of LiMollIO2Determined from Total Neutron Scattering. Inorganic Chemistry, 1997, 36, 1749-1753.	4.0	17
74	Structure and thermal properties of yttrium alumino-phosphate glasses. Journal of Physics Condensed Matter, 2008, 20, 115204.	1.8	17
75	Structural Modeling of Dahlia-Type Single-Walled Carbon Nanohorn Aggregates by Molecular Dynamics. Journal of Physical Chemistry A, 2013, 117, 9057-9061.	2.5	17
76	LAD, 1982 - 1998: the first ISIS diffractometer. Journal of Physics Condensed Matter, 1999, 11, 9127-9138.	1.8	16
77	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mrow><mml:mtext>Ge</mml:mtext><mml:mi>X</mml:mi></mml:mrow> <mi>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"&gt;<mml:mrow><mml:mrow><mml:mi>X</mml:mi>XXX</mml:mrow></mml:mrow></mi>	3.2	16 o> <mml:nt< td=""></mml:nt<>
78	Physical Review B, 2009, 80, . Neutron scattering study of bulk amorphous GaSb. Journal of Non-Crystalline Solids, 1999, 244, 250-259.	3.1	15
79	A neutron and X-ray diffraction study of Ca–Mg–Cu metallic glasses. Intermetallics, 2011, 19, 860-870.	3.9	15
80	Short-Range Order Details of Metaphosphate Glasses Studied by Pulsed Neutron Scattering. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1995, 50, 684-692.	1.5	14
81	Structure of Na2O–GeO2–P2O5 glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2014, 390, 59-69.	3.1	14
82	Rearrangement of the structure during nucleation of a cordierite glass doped with TiO <sub>2</sub> . Journal of Physics Condensed Matter, 2010, 22, 185401.	1.8	13
83	Bent Hgl <sub>2</sub> Molecules in the Melt and Sulfide Glasses: Implications for Nonlinear Optics. Chemistry of Materials, 2019, 31, 4103-4112.	6.7	13
84	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
85	Structural Characterization and Redox Catalytic Properties of Cerium(IV) Pyrochlore Oxides. Chemistry of Materials, 2011, 23, 5464-5473.	6.7	12
86	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
87	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
88	Investigation on permanently densified vitreous silica by means of neutron scattering. Physica B: Condensed Matter, 1996, 219-220, 287-289.	2.7	11
89	Model-based computation of powder diffraction patterns for carbon nanotubes. Diamond and Related Materials, 2004, 13, 1218-1221.	3.9	11
90	Structure of titanophosphate glasses studied by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2007, 353, 1802-1807.	3.1	11

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91	Local structure and disorder in crystalline Pb9Al8O21. Journal of Solid State Chemistry, 2008, 181, 1087-1102.	2.9	11
92	Molecular dynamics simulation of carbon nanotube structure. Journal of Molecular Structure, 2006, 792-793, 78-81.	3.6	10
93	Structural Differences between the Glass and Crystal Forms of the Transparent Ferroelectric Nanocomposite, LaBGeO <sub>5</sub> , from Neutron Diffraction and NMR Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 20963-20980.	3.1	10
94	Structural units of binary vanadate glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2021, 572, 121120.	3.1	10
95	Effect of copper on the structure and other physical properties of Cuî—,Asî—,Te chalcogenide glasses. Journal of Physics and Chemistry of Solids, 1997, 58, 1625-1630.	4.0	9
96	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
97	Influence of Lone-Pair Cations on the Germanate Anomaly in Glass. Journal of Physical Chemistry C, 2011, 115, 14997-15007.	3.1	9
98	Complementary studies of structural characteristics for carbon materials with X-rays and neutrons. Journal of Alloys and Compounds, 2005, 401, 18-23.	5.5	8
99	Investigation of some new hydro(solvo)thermal synthesis routes to nanostructured mixed-metal oxides. Journal of Solid State Chemistry, 2014, 214, 30-37.	2.9	8
100	Atomic structure of chlorine containing calcium silicate glasses by neutron diffraction and <sup>29</sup> Si solidâ€state <scp>NMR</scp> . International Journal of Applied Glass Science, 2017, 8, 383-390.	2.0	8
101	Free volume distribution and structural inhomogeneity in Ni50V50 amorphous alloy. Journal of Alloys and Compounds, 2019, 770, 350-355.	5.5	8
102	Neutron Diffraction Studies of Graphiteâ <sup>^</sup> Potassiumâ <sup>^</sup> Methylamine:Â Staging Transitions and Structure of New Graphite Intercalation Compounds. Journal of Physical Chemistry B, 2000, 104, 10969-10972.	2.6	7
103	The structure of vitreous boron sulphide. Journal of Non-Crystalline Solids, 2001, 293-295, 383-388.	3.1	7
104	Structural analysis of xCsCl(1â^'x)Ga2S3 glasses. Journal of Non-Crystalline Solids, 2008, 354, 134-137.	3.1	7
105	Total neutron scattering investigation of the structure of a cobalt gallium oxide spinel prepared by solvothermal oxidation of gallium metal. Journal of Physics Condensed Matter, 2013, 25, 454212.	1.8	7
106	Continuous random network models of Cu–As–Te glasses. Physica B: Condensed Matter, 2000, 276-278, 463-464.	2.7	6
107	Structure of a potassium germanophosphate glass by x-ray and neutron diffraction. Solid State Communications, 2007, $143$ , $403$ - $407$ .	1.9	6
108	MAS-NMR studies of carbonate retention in a very wide range of Na2O-SiO2 glasses. Journal of Non-Crystalline Solids, 2020, 534, 119958.	3.1	6

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109	Structure of Cuî—'Asî—'Te glasses - Neutron diffraction and reverse Monte Carlo simulations. Physica B: Condensed Matter, 1997, 234-236, 424-425.	2.7	5
110	Structure of rare-earth chalcogenide glasses by neutron and x-ray diffraction. Journal of Physics Condensed Matter, 2017, 29, 225703.	1.8	5
111	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
112	An inelastic neutron scattering study of the dynamics of hydrogenated and deuterated amorphous silicon. Physica A: Statistical Mechanics and Its Applications, 1993, 201, 395-401.	2.6	4
113	The structure of sodium silicate glass from neutron diffraction and modeling of oxygenâ€oxygen correlations. Journal of the American Ceramic Society, 2021, 104, 6155.	3.8	4
114	Structural Investigation of Silicon Carbonitride Glasses by Neutron Diffraction. Materials Science Forum, 2002, 386-388, 365-370.	0.3	3
115	Neutron scattering length determination by means of total scattering. Journal of Applied Crystallography, 2018, 51, 854-866.	4.5	3
116	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
117	Pulsed neutron diffraction from GeS2-based sulphide glasses. Journal of Physics and Chemistry of Solids, 1999, 60, 1473-1477.	4.0	2
118	Energy relaxation and pulsed neutrons diffraction studies of carbon nanotubes. Diamond and Related Materials, 2006, 15, 1090-1093.	3.9	2
119	A neutron diffraction and 205Tl NMR study of the thallium germanate glass system. Journal of Non-Crystalline Solids, 2010, 356, 2517-2523.	3.1	2
120	Neutron Diffraction, Theory., 2017,, 88-97.		2
121	Preparation and Structure of the Ion-Conducting Mixed Molecular Glass Ga <sub>2</sub> 1 <sub>3.17</sub> . Inorganic Chemistry, 2021, 60, 6319-6326.	4.0	2
122	Structure of silver molybdate glasses by X-ray and neutron diffraction. Journal of Non-Crystalline Solids, 2021, 573, 121143.	3.1	2
123	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
124	Structure of binary antimony phosphate glasses by diffraction methods. Journal of Non-Crystalline Solids, 2022, 583, 121476.	3.1	2
125	Reverse Monte Carlo modeling of atomic configuration for Li2S-P2S5superionic glasses. IOP Conference Series: Materials Science and Engineering, 2011, 18, 022012.	0.6	1
126	Structural Disorder in (Bi, M)2(Fe, Mn, Bi)2O6+ $\times$ (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

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127	Structure of tin phosphate glasses by neutron and X-ray diffraction. Journal of Non-Crystalline Solids: X, 2019, 2, 100017.	1.2	1
128	Analysis of Physical and Structural Properties of Alkali Oxide–Modified Tellurite Glasses. Journal of Undergraduate Reports in Physics, 2020, 30, 100003.	0.1	1
129	Neutron diffraction investigation of copper tellurite glasses with high real-space resolution. Journal of Applied Crystallography, 2021, 54, .	4.5	1
130	Unexpected role of metal halides in a chalcogenide glass network. Materials and Design, 2022, 216, 110547.	7.0	1
131	Phonon anomaly of under-doped YBa2Cu3O6.6 studied by neutron scattering. Physica B: Condensed Matter, 1996, 219-220, 204-206.	2.7	0
132	Neutron Diffraction, Theory*. , 1999, , 1779-1789.		0