

# Christophe Payen

## List of Publications by Year in descending order

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101  
papers

2,832  
citations

159358

30  
h-index

189595

50  
g-index

117  
all docs

117  
docs citations

117  
times ranked

3270  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanocrystalline BaCo <sub>3</sub> (VO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> with a kagome lattice of Co ions: synthesis, crystal structure and magnetic properties. Journal of Materials Chemistry C, 2022, 10, 3287-3291.	2.7	4
2	Investigating the Cycling Stability of Fe <sub>2</sub> WO <sub>6</sub> Pseudocapacitive Electrode Materials. Nanomaterials, 2021, 11, 1405.	1.9	9
3	Composites between Perovskite and Layered Co-Based Oxides for Modification of the Thermoelectric Efficiency. Materials, 2021, 14, 7019.	1.3	4
4	Unveiling Pseudocapacitive Charge Storage Behavior in FeWO <sub>4</sub> Electrode Material by Operando X-Ray Absorption Spectroscopy. Small, 2020, 16, e2002855.	5.2	16
5	Copper-Substituted NiTiO <sub>3</sub> Ilmenite-Type Materials for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 31038-31048.	4.0	8
6	Strong magnetic exchange and frustrated ferrimagnetic order in a weberite-type inorganic-organic hybrid fluoride. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180224.	1.6	6
7	Cool-SPS stabilization and sintering of thermally fragile, potentially magnetoelectric, NH <sub>4</sub> FeP <sub>2</sub> O <sub>7</sub> . Ceramics International, 2019, 45, 9674-9678.	2.3	13
8	Evidence of Wolframite-Type Structure in Ultrasmall Nanocrystals with a Targeted Composition MnWO <sub>4</sub> . Inorganic Chemistry, 2019, 58, 7822-7827.	1.9	5
9	Process- and optoelectronic-control of NiOx thin films deposited by reactive high power impulse magnetron sputtering. Journal of Applied Physics, 2017, 121, .	1.1	21
10	A magnetisation and Mössbauer study of triazole (M <sub>1-x</sub> <sup>2+</sup> M <sub>x</sub> <sup>3+</sup> )M <sub>3</sub> F <sub>5</sub> (Htaz) <sub>1-x</sub> (taz) <sub>x</sub> weberites (M = Fe, Co, Mn, Zn, Ga, V). Dalton Transactions, 2017, 46, 5352-5362.	1.6	16
11	quantum spin liquid $\text{Ba}_3\text{Mn}_2\text{O}_9$ . Physical Review B, 2017, 95, 040407.	1.1	35
12	Phase transitions and magnetic structures in MnW <sub>1-x</sub> Mo <sub>x</sub> O <sub>4</sub> compounds (0 ≤ x ≤ 0.2). Journal of Physics Condensed Matter, 2016, 28, 336003.	1.1	39
13	A new high pressure form of Ba <sub>3</sub> NiSb <sub>2</sub> O <sub>9</sub> . Journal of Solid State Chemistry, 2016, 237, 166-173.	1.4	11
14	Gapless quantum spin liquid ground state in the spin-1 antiferromagnet 6HB- $\text{Ba}_3\text{Mn}_2\text{O}_9$ . Physical Review B, 2016, 93, .	1.1	39
15	Persistent Type-II Multiferroicity in Nanostructured MnWO <sub>4</sub> Ceramics. Chemistry of Materials, 2016, 28, 7582-7585.	3.2	7
16	Pseudocapacitive FeWO <sub>4</sub> Electrode: From Charge Storage Mechanism to Practical Use in Asymmetric Cell. ECS Meeting Abstracts, 2016, MA2016-02, 937-937.	0.0	1
17	Nanocrystalline FeWO <sub>4</sub> as a pseudocapacitive electrode material for high volumetric energy density supercapacitors operated in an aqueous electrolyte. Electrochemistry Communications, 2015, 57, 61-64.	2.3	66
18	Pair Distribution Function and Density Functional Theory Analyses of Hydrogen Trapping by $\text{MnO}_2$ . Inorganic Chemistry, 2015, 54, 1194-1196.	1.9	14

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19	Incorporation of Jahnâ€“Teller Cu <sup>2+</sup> Ions into Magnetolectric Multiferroic MnWO <sub>4</sub> : Structural, Magnetic, and Dielectric Permittivity Properties of Mn <sup>1â€“</sup> Cu <sup>x</sup> WO <sub>4</sub> (x = 0.25). Inorganic Chemistry, 2015, 54, 10623-10631.	1.9	24
20	FeWO <sub>4</sub> As Electrode Material for High Volumetric Capacitance Supercapacitors. ECS Meeting Abstracts, 2015, . .	0.0	0
21	Singlet Ground State of the Quantum Antiferromagnet $\text{BaCu}_3\text{O}_9$ . Physical Review Letters, 2012, 109, 117203.	1.1	22
22	Dielectric Study of Unexpected Transitions in Multiferroic Mn <sub>1-x</sub> (Mg,Zn) <sub>x</sub> WO <sub>4</sub> Ceramics. Ferroelectrics, 2012, 428, 94-100.	0.3	2
23	Frustrated magnetism in the S = 1 kagomÃ© lattice BaNi <sub>3</sub> (OH) <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub> . Chemical Communications, 2012, 48, 64-66.	2.2	53
24	Increasing the Phase-Transition Temperatures in Spin-Frustrated Multiferroic MnWO <sub>4</sub> by Mo Doping. Chemistry of Materials, 2012, 24, 353-360.	3.2	33
25	Spin dynamics, short range order, and spin freezing in $Y\text{MnO}_5$ .	1.1	22
26	Comparative study of coreâ€“shell iron/iron oxide gold covered magnetic nanoparticles obtained in different conditions. Journal of Nanoparticle Research, 2011, 13, 6181-6192.	0.8	23
27	Phonon control of magnetic relaxation in the pyrochlore slab compounds $\text{SrCr}_2\text{Mn}_9$ . Physical Review B, 2010, 81, . .	1.1	11
28	DFT-NMR Investigation and <sup>51</sup> V 3QMAS Experiments for Probing Surface OH Ligands and the Hydrogen-Bond Network in a Polyoxovanadate Cluster: The Case of Cs <sub>4</sub> [H <sub>2</sub> V <sub>10</sub> O <sub>28</sub> ]Ã©4H <sub>2</sub> O. Journal of the American Chemical Society, 2010, 132, 4653-4668.	6.6	32
29	Synthesis and characterization of the coreâ€“shell Au covered LSMO manganite magnetic nanoparticles. Synthetic Metals, 2010, 160, 1692-1698.	2.1	17
30	Effect of Nonmagnetic Substituents Mg and Zn on the Phase Competition in the Multiferroic Antiferromagnet MnWO <sub>4</sub> . Chemistry of Materials, 2009, 21, 5203-5214.	3.2	45
31	Magnetic structure and ferroelectric polarization of $\text{MnWO}_4$ by density functional calculations and classical spin analysis. Physical Review B, 2009, 80, . .	1.1	34
32	Polypyrrole coated magnetite nanoparticles from water based nanofluids. Journal Physics D: Applied Physics, 2008, 41, 245002.	1.3	51
33	On the Cyclability of the Thermochromism in CuMoO <sub>4</sub> and Its Tungsten Derivatives CuMo <sup>1â€“</sup> W <sup>x</sup> O <sub>4</sub> (x = 0.12). Chemistry of Materials, 2008, 20, 2075-2077.	3.2	27
34	Low-temperature relaxation in kagome bilayer antiferromagnets. Journal of Physics Condensed Matter, 2007, 19, 145254.	0.7	6
35	Adaptable Thermochromism in the $\text{CuMo}_{1-x}\text{W}_x\text{O}_4$ Series (0 = x < 0.1): A Behavior Related to a First-Order Phase Transition with a Transition Temperature Depending on x. Inorganic Chemistry, 2007, 46, 10200-10207.	1.9	57
36	Structure, morphology and magnetic properties of Feâ€“Au core-shell nanoparticles. Surface Science, 2007, 601, 4352-4357.	0.8	34

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37	Phonon-assisted relaxation in a frustrated antiferromagnet. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 1325-1327.	1.0	0
38	Mössbauer effect at $^{119}\text{Sn}^{4+}$ nuclei in fine crystalline MnO. <i>Russian Journal of Inorganic Chemistry</i> , 2007, 52, 1262-1268.	0.3	3
39	Neutron Spin-Echo Investigation of Slow Spin Dynamics in Kagomé-Bilayer Frustrated Magnets as Evidence for Phonon Assisted Relaxation in $\text{SrCr}_9\text{Ga}_{12}\text{As}_9\text{O}_{19}$ . <i>Physical Review Letters</i> , 2006, 97, 047203.	2.9	21
40	First-Principles Calculations within Periodic Boundary Conditions of the NMR Shielding Tensor for a Transition Metal Nucleus in a Solid State System: The Example of $^{51}\text{V}$ in $\text{AlVO}_4$ . <i>Journal of Physical Chemistry B</i> , 2006, 110, 21403-21407.	1.2	27
41	Cationic ordering and second-staging structures in copper-chromium and zinc-chromium layered double hydroxides. <i>Applied Clay Science</i> , 2005, 28, 111-120.	2.6	41
42	Spin correlations in the pyrochlore slab compounds $\text{Ba}_2\text{Sn}_2\text{Ga}_{10}\text{P}_7\text{ZnCr}_7\text{O}_{22}$ . <i>Journal of Physics Condensed Matter</i> , 2004, 16, S835-S842.	0.7	15
43	Magnetoelastic polarons in the hole-doped quasi-one-dimensional model system $\text{Y}_2\text{C}_x\text{BaNiO}_5$ . <i>Physical Review B</i> , 2004, 70, .	1.1	1
44	Spin fluctuations in the pyrochlore slab compound $\text{Ba}_2\text{Sn}_2\text{Ga}_3\text{ZnCr}_7\text{O}_{22}$ . <i>Physica B: Condensed Matter</i> , 2004, 350, E289-E291.	1.3	3
45	Photoemission spectroscopy study of the hole-doped Haldane chain $\text{Y}_2\text{S}_x\text{BaNiO}_5$ . <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 200, 242-247.	0.6	0
46	On the Electrochemical Reactivity Mechanism of $\text{CoSb}_3$ vs. Lithium. <i>Journal of the Electrochemical Society</i> , 2003, 150, A732.	1.3	58
47	Anomalous spectral weight in photoemission spectra of the hole-doped Haldane chain $\text{Y}_2\text{S}_x\text{BaNiO}_5$ . <i>Physical Review B</i> , 2003, 67, .	1.1	6
48	Trivalent Cation Substitution Effect into Layered Double Hydroxides $\text{Co}_2\text{Fe}_y\text{Al}_{1-y}(\text{OH})_6\text{Cl}\cdot n\text{H}_2\text{O}$ : Study of the Local Order. <i>Journal of Solid State Chemistry</i> , 2002, 167, 508-516.	1.4	57
49	Spin configurations in a kagomé $\frac{1}{2}$ -based frustrated antiferromagnet: analysis of dynamic disorder by the reverse Monte Carlo method. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s883-s885.	1.1	4
50	Unconventional antiferromagnetic correlations of the doped Haldane gapped system $\text{Y}_2\text{BaNi}_{1-x}\text{Zn}_x\text{O}_5$ . <i>European Physical Journal B</i> , 2002, 25, 39-51.	0.6	2
51	Electronic structure of a hole doped oxide with a quasi-1D crystal structure $\text{Y}_2\text{S}_x(\text{Sr,Ca})_x\text{BaNiO}_5$ . <i>Journal of Alloys and Compounds</i> , 2001, 317-318, 149-152.	2.8	9
52	High-resolution neutron study of the effects of magnetic dilution in the strongly frustrated system $\text{SrCr}_x\text{Ga}_{12-x}\text{O}_{19}$ . <i>Canadian Journal of Physics</i> , 2001, 79, 1401-1407.	0.4	1
53	Charge-doped nickel oxide, $\text{Y}_{1.90}\text{Ca}_{0.10}\text{BaNiO}_5$ . <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2001, 57, i70-i71.	0.2	1
54	$\text{Na}_3\text{Cr}_2\text{P}_3\text{S}_{12}$ and $\text{K}_3\text{Cr}_2\text{P}_3\text{S}_{12}$ : Two New One-Dimensional Thiophosphate Compounds with a Novel Structure. <i>Journal of Solid State Chemistry</i> , 2001, 162, 195-203.	1.4	19

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55	Random interactions and spin-glass thermodynamic transition in the hole-doped Haldane system $Y_{2-x}Ca_xBaNiO_5$ . <i>Physical Review B</i> , 2001, 63, .	1.1	8
56	High-resolution neutron study of the effects of magnetic dilution in the strongly frustrated system $SrCr_{1-x}Ga_xO_{19}$ . <i>Canadian Journal of Physics</i> , 2001, 79, 1401-1407.	0.4	6
57	Temperature dependence of the spin dynamics in the strongly frustrated antiferromagnet $SrCr_{9-x}Ga_xO_{19}$ (SCGO). <i>Physica B: Condensed Matter</i> , 2000, 284-288, 1371-1372.	1.3	12
58	Evidence of quantum criticality in the doped Haldane system $Y_2BaNiO_5$ . <i>Physical Review B</i> , 2000, 62, 2998-3001.	1.1	18
59	Neutron and X-Ray Diffraction Study of the $SrCr_8Ga_4O_{19}$ Kagome Compound Synthesized by Citrate Route. <i>Materials Science Forum</i> , 2000, 321-324, 828-833.	0.3	2
60	Spin freezing in the kagome system $SrCr_8Ga_4O_{19}$ – high resolution study of the elastic and low-energy dynamic responses. <i>Physica B: Condensed Matter</i> , 1999, 266, 104-107.	1.3	14
61	Polarized neutron scattering study of the kagome antiferromagnet $SrCr_8Ga_4O_{19}$ . <i>Physica B: Condensed Matter</i> , 1999, 267-268, 139-141.	1.3	17
62	Copper sublattice ordering in layered $CuMP_2Se_6$ (M=In, Cr). <i>Journal of Alloys and Compounds</i> , 1999, 283, 122-127.	2.8	70
63	Electrochemical Synthesis for the Control of $Fe_3O_4$ Nanoparticle Size. Morphology, Microstructure, and Magnetic Behavior. <i>Chemistry of Materials</i> , 1999, 11, 141-147.	3.2	330
64	Pressure-induced phase transition in ferroelectric $CuInP_2S_6$ . <i>Solid State Communications</i> , 1998, 108, 43-47.	0.9	16
65	Nanocomposites Built from $MoS_2$ and Various Metal-Containing Layers. <i>Molecular Crystals and Liquid Crystals</i> , 1998, 311, 377-382.	0.3	8
66	Ionic conductivity in ferroic $CuInP_2S_6$ and $CuCrP_2S_6$ . <i>Ferroelectrics</i> , 1997, 196, 257-260.	0.3	84
67	Low-energy response in the spin-ladder compound $(VO)_2P_2O_7$ . <i>Physica B: Condensed Matter</i> , 1997, 234-236, 895-896.	1.3	3
68	Nanocomposite materials consisting of alternating layers of molybdenum disulfide and cobalt or nickel hydroxides: Magnetic characterization. <i>Solid State Communications</i> , 1997, 102, 419-423.	0.9	12
69	The Synthesis, Crystal Structures and Magnetic Properties of $Cu_4(AsO_4)_2(O)$ and $Ba_2Cu_7(AsO_4)_6$ . <i>Chemische Berichte</i> , 1997, 130, 63-67.	0.2	10
70	Syntheses, Structural Analyses, and Unusual Magnetic Properties of $Ba_2CoSi_2O_7$ and $BaCo_2Si_2O_7$ . <i>Inorganic Chemistry</i> , 1996, 35, 3492-3497.	1.9	49
71	Copper ordering in lamellar $CuMP_2S_6$ (M= Cr, In): Transition to an antiferroelectric or ferroelectric phase. <i>Ferroelectrics</i> , 1996, 185, 135-138.	0.3	46
72	Synthesis, Structures, Magnetic Properties, and Phase Transition of Manganese(II) Divanadate: $Mn_2V_2O_7$ . <i>Journal of Solid State Chemistry</i> , 1996, 121, 214-224.	1.4	64

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73	The Synthesis, Structural Analysis and Magnetic Properties of a New Mixed Metal Ferrite $Ba_3Fe_{24}Ti_7O_{53}$ . <i>Chemische Berichte</i> , 1996, 129, 1441-1445.	0.2	3
74	A new manganese ortho-arsenate. The synthesis, structure and magnetic properties of $Ba_2Mn(AsO_4)_2$ . <i>Polyhedron</i> , 1996, 15, 1235-1239.	1.0	5
75	A new mixed metal titanate: The synthesis and characterization of $Ba_2Fe_2Ti_4O_{13}$ . <i>Polyhedron</i> , 1996, 15, 2567-2571.	1.0	14
76	Synthesis and Structure of $NaMn_3(PO_4)(HPO_4)_2$ , an Unoxidized Variant of the Alluaudite Structure Type. <i>Journal of Solid State Chemistry</i> , 1995, 115, 240-246.	1.4	41
77	On $CuCrP_2S_6$ : Copper Disorder, Stacking Distortions, and Magnetic Ordering. <i>Journal of Solid State Chemistry</i> , 1995, 116, 208-210.	1.4	37
78	New manganese pyrophosphates: The syntheses, crystallographic characterizations and magnetic properties of $BaMnP_2O_7$ and $CaMnP_2O_7$ . <i>Polyhedron</i> , 1995, 14, 3473-3480.	1.0	25
79	Quasi-1D antiferromagnets with $S = 1$ and : The isostructural compounds $AgVP_2S_6$ and $AgCrP_2S_6$ . <i>Physica B: Condensed Matter</i> , 1995, 213-214, 170-172.	1.3	11
80	A new family of 2D antiferromagnets: the layered phosphonates $MII(RPO_3)_2 \cdot H_2O$ ; $M \rightarrow Mn, Fe, Co, Ni$ ; $R =$ alkyl, phenyl. <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 140-144, 1719-1720.	1.0	29
81	Finite segments in quasi-1D Heisenberg antiferromagnets: comparison of the isostructural systems $AgVP_2S_6$ ( $S = 1$ ) and $AgCrP_2S_6$ ( $S = 0$ ). <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 140-144, 1677-1678.	1.0	7
82	A New Mixed-Metal Titanate. The Synthesis and Characterization of $Ba_2NiTi_5O_{13}$ . <i>Chemistry of Materials</i> , 1995, 7, 2168-2170.	3.2	6
83	$Cu_4(AsO_4)_2(O)$ : A New Copper Arsenate with Unusual Low Temperature Magnetic Properties. <i>Inorganic Chemistry</i> , 1995, 34, 5397-5398.	1.9	25
84	Room-temperature crystal structure of the layered phase $CuInIIIIP_2S_6$ . <i>Journal of Alloys and Compounds</i> , 1995, 218, 157-164.	2.8	125
85	Synthesis, Structure and Magnetic Properties of Some New Metal (II) Phosphonates: Layered $Fe(C_2H_5PO_3)_2 \cdot H_2O$ and $\beta$ - $Cu(C_2H_5PO_3)_2 \cdot H_2O$ and $\beta$ - $Cu(CH_3PO_3)_2 \cdot H_2O$ . <i>Materials Science Forum</i> , 1994, 152-153, 365-370.	0.3	0
86	Paraelectric-Ferroelectric Transition in the Lamellar Thiophosphate $CuInP_2S_6$ . <i>Chemistry of Materials</i> , 1994, 6, 1575-1580.	3.2	120
87	Novel structural arrangement for divalent metal phosphonates: synthesis of tert-butylphosphonates and structure of $Co[(CH_3)_3CPO_3] \cdot H_2O$ . <i>Journal of Materials Chemistry</i> , 1994, 4, 1319-1323.	6.7	12
88	Preparation, Structure, and Magnetic Properties of Copper(II) Phosphonates. $\beta$ - $Cu(CH_3PO_3)_2$ , an Original Three-Dimensional Structure with a Channel-Type Arrangement. <i>Inorganic Chemistry</i> , 1994, 33, 4885-4890.	1.9	167
89	Synthesis, Structure and Magnetic Properties of Some New Metal(II) Phosphonates: Layered $Fe(C_2H_5PO_3)_2 \cdot H_2O$ , $\beta$ - $Cu(C_2H_5PO_3)_2$ and $Co(t-C_4H_9PO_3)_2 \cdot H_2O$ . <i>Materials Research Society Symposia Proceedings</i> , 1994, 346, 967.	0.1	0
90	Finite segments, free spins and random exchange in spin $S=1$ quasi one-dimensional antiferromagnets. <i>Solid State Communications</i> , 1993, 85, 597-599.	0.9	6

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91	BaCo <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> : A new one-dimensional antiferromagnet based on chains of oxide bridged CoO <sub>4</sub> tetrahedra. <i>Polyhedron</i> , 1993, 12, 2075-2077.	1.0	18
92	Room temperature synthesis study of highly disordered a-Ni <sub>2</sub> P <sub>2</sub> S <sub>6</sub> . <i>Journal of Non-Crystalline Solids</i> , 1993, 160, 1-17.	1.5	11
93	Low-temperature neutron powder diffraction study of copper chromium thiophosphate (CuCrP <sub>2</sub> S <sub>6</sub> ): observation of an ordered, antipolar copper sublattice. <i>Chemistry of Materials</i> , 1993, 5, 758-760.	3.2	41
94	Synthesis, structure, and magnetic properties of a new lamellar iron phosphonate, FeI(C <sub>2</sub> H <sub>5</sub> PO <sub>3</sub> ).H <sub>2</sub> O. <i>Chemistry of Materials</i> , 1993, 5, 583-587.	3.2	93
95	Synthesis and structure of chromium antimony triselenide (CrSbSe <sub>3</sub> ): a pseudo-one-dimensional ferromagnet. <i>Chemistry of Materials</i> , 1993, 5, 237-240.	3.2	32
96	Preparation and structure of copper(II) ethylphosphonate. Structural transition between its hydrated and dehydrated forms. <i>Inorganic Chemistry</i> , 1993, 32, 4617-4620.	1.9	60
97	One-Dimensional Heisenberg Antiferromagnet with Spin $S = 3/2$ . Experiments on AgCrP <sub>2</sub> S <sub>6</sub> . <i>Europhysics Letters</i> , 1993, 21, 623-628.	0.7	16
98	Magnetic correlations in the S=1 quasi-one-dimensional Heisenberg antiferromagnet AgVP <sub>2</sub> S <sub>6</sub> . <i>Physica B: Condensed Matter</i> , 1992, 180-181, 197-198.	1.3	9
99	Static and dynamic properties of the quasi-1D Heisenberg antiferromagnets AgVP <sub>2</sub> S <sub>6</sub> (S=1) and AgCrP <sub>2</sub> S <sub>6</sub> (S = 3/2). <i>Journal of Magnetism and Magnetic Materials</i> , 1992, 104-107, 797-798.	1.0	10
100	Dynamic structure factor $[S(Q, \omega)]$ of the S=1 quasi-one-dimensional Heisenberg antiferromagnet: Neutron-scattering study on AgVP <sub>2</sub> S <sub>6</sub> . <i>Physical Review Letters</i> , 1991, 67, 497-500.	2.9	70
101	Powder and single crystal susceptibility of the quasi-1D Heisenberg antiferromagnetic chain compounds AgVP <sub>2</sub> S <sub>6</sub> (S = 1) and AgCrP <sub>2</sub> S <sub>6</sub> (S = 3/2). <i>Journal of Magnetism and Magnetic Materials</i> , 1990, 84, 95-101.	1.0	10