Pierric Lemoine

List of Publications by Year
in descending order

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60 papers	1,191 citations	393982 19 h-index	414034 32 g-index
61 all docs	61 docs citations	61 times ranked	817 citing authors

#	Article	IF	Citations
1	Structural stability of the synthetic thermoelectric ternary and nickel-substituted tetrahedrite phases. Journal of Alloys and Compounds, 2015, 634, 253-262.	2.8	147
2	High-Performance Thermoelectric Bulk Colusite by Process Controlled Structural Disordering. Journal of the American Chemical Society, 2018, 140, 2186-2195.	6.6	98
3	Thermoelectric Materials: A New Rapid Synthesis Process for Nontoxic and Highâ€Performance Tetrahedrite Compounds. Journal of the American Ceramic Society, 2016, 99, 51-56.	1.9	62
4	Low thermal conductivity in ternary Cu4Sn7S16 compound. Acta Materialia, 2015, 97, 180-190.	3.8	61
5	High Power Factors of Thermoelectric Colusites Cu₂₆T₂Ge₆S₃₂ (T = Cr, Mo, W): Toward Functionalization of the Conductive â€œCuâ€“Sâ€•Network. Advanced Energy Materials, 2019, 9, 1803249.	10.2	51
6	Structural analysis and thermoelectric properties of mechanically alloyed colusites. Journal of Materials Chemistry C, 2016, 4, 7455-7463.	2.7	42
7	Copper Hyper-Stoichiometry: The Key for the Optimization of Thermoelectric Properties in Stannoidite Cu_{8+x}Fe_{3â€“x}Sn₂S₁₂. Journal of Physical Chemistry C, 2017, 121, 16454-16461.	1.5	42
8	Designing a Thermoelectric Copper-Rich Sulfide from a Natural Mineral: Synthetic Germanite Cu₂₂Fe₈Ge₄S₃₂. Inorganic Chemistry, 2017, 56, 13376-13381.	1.9	40
9	Copperâ€Rich Thermoelectric Sulfides: Sizeâ€Mismatch Effect and Chemical Disorder in the [TS₄]Cu₆ Complexes of Cu₂₆T₂Ge₆S₃₂ (T=Cr, Mo, W) Colusites. Angewandte Chemie - International Edition, 2019, 58, 15455-15463.	7.2	36
10	Supramolecular Anchoring of Octahedral Molybdenum Clusters onto Graphene and Their Synergies in Photocatalytic Water Reduction. Inorganic Chemistry, 2019, 58, 15443-15454.	1.9	34
11	Recent developments in high-performance thermoelectric sulphides: an overview of the promising synthetic colusites. Journal of Materials Chemistry C, 2021, 9, 773-795.	2.7	33
12	Crystal Structure Classification of Copperâ€Based Sulfides as a Tool for the Design of Inorganic Functional Materials. Angewandte Chemie - International Edition, 2022, 61, .	7.2	25
13	XBi₄S₇ (X = Mn, Fe): New Costâ€Efficient Layered nâ€Type Thermoelectric Sulfides with Ultralow Thermal Conductivity. Advanced Functional Materials, 2019, 29, 1904112.	7.8	24
14	Key Role of d⁰ and d¹⁰ Cations for the Design of Semiconducting Colusites: Large Thermoelectric ZT in Cu₂₆Ti₂Sb₆S₃₂ Compounds. Chemistry of Materials, 2021, 33, 3449-3456.	3.2	24
15	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>26</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi	0.9	24
16	High temperature neutron powder diffraction study of the Cu 12 Sb 4 S 13 and Cu 4 Sn 7 S 16 phases. Journal of Solid State Chemistry, 2017, 247, 83-89.	1.4	23
17	Ordered sphalerite derivative Cu₅Sn₂S₇: a degenerate semiconductor with high carrier mobility in the Cuâ€“Snâ€“S diagram. Journal of Materials Chemistry A, 2021, 9, 10812-10826.	5.2	23
18	Up-scaled synthesis process of sulphur-based thermoelectric materials. RSC Advances, 2016, 6, 10044-10053.	1.7	22

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19	A scalable synthesis route for multiscale defect engineering in the sustainable thermoelectric quaternary sulfide Cu26V2Sn6S32. Acta Materialia, 2020, 195, 229-239.	3.8	22
20	Thermal Stability of the Crystal Structure and Electronic Properties of the High Power Factor Thermoelectric Colusite Cu₂₆Cr₂Ge₆S₃₂. Chemistry of Materials, 2020, 32, 830-840.	3.2	19
21	Inorganic Niobium and Tantalum Octahedral Cluster Halide Compounds with Three-Dimensional Frameworks: A Review on Their Crystallographic and Electronic Structures. Structure and Bonding, 2019, , 143-190.	1.0	18
22	NaGdS₂: A Promising Sulfide for Cryogenic Magnetic Cooling. Chemistry of Materials, 2022, 34, 1829-1837.	3.2	18
23	Crossover from Germanite to Renierite-Type Structures in Cu_{22â€“x}Zn_xFe₈Ge₄S₃₂ Thermoelectric Sulfides. ACS Applied Energy Materials, 2019, 2, 7679-7689.	2.5	17
24	Lattice and Valence Electronic Structures of Crystalline Octahedral Molybdenum Halide Clusters-Based Compounds, Cs₂[Mo₆X₁₄] (X = Cl, Br, I), Studied by Density Functional Theory Calculations. Inorganic Chemistry, 2017, 56, 6234-6243.	1.9	16
25	Neutron Diffraction Study of the Hexagonal Perovskite-Type Compound LaCrGe₃. Solid State Phenomena, 0, 194, 71-74.	0.3	15
26	A Tunable Structural Family with Ultralow Thermal Conductivity: Copper-Deficient Cu_{1â€“x}â–¡_xPb_{1â€“x}Bi_{1+x}S₃. Journal of the American Chemical Society, 2022, 144, 1846-1860.	6.6	15
27	Toppling the Transport Properties with Cationic Overstoichiometry in Thermoelectric Colusite: [Cu₂₆Cr₂Ge₆]_{1+Î´}S₃₂. ACS Applied Energy Materials, 2020, 3, 4180-4185.	2.5	14
28	Local-Disorder-Induced Low Thermal Conductivity in Degenerate Semiconductor Cu₂₂Sn₁₀S₃₂. Inorganic Chemistry, 2021, 60, 16273-16285.	1.9	14
29	From Cs2Mo6Cl14 to Cs2Mo6Cl14Â·H2O and Vice Versa: Crystal Chemistry Investigations. Journal of Cluster Science, 2017, 28, 773-798.	1.7	13
30	Electrophoretic Coating of Octahedral Molybdenum Metal Clusters for UV/NIR Light Screening. Coatings, 2017, 7, 114.	1.2	13
31	High-temperature microstructures of ternary Co-30wt.% Cr-based alloys over the [0â€“2.0wt.%] carbon range. Journal of Alloys and Compounds, 2009, 467, 227-234.	2.8	12
32	Theoretical and experimental determination of the crystal structures of cesiumâ€“molybdenum chloride. Japanese Journal of Applied Physics, 2016, 55, 075502.	0.8	12
33	Red-NIR luminescence of Mo₆ monolayered assembly directly anchored on Au(001). Materials Horizons, 2019, 6, 1828-1833.	6.4	12
34	Revisiting properties of edge-bridged bromide tantalum clusters in the solid-state, in solution and vice versa: an intertwined experimental and modelling approach. Dalton Transactions, 2021, 50, 8002-8016.	1.6	11
35	Long-Range Cationic Order Collapse Triggered by S/Cl Mixed-Anion Occupancy Yields Enhanced Thermoelectric Properties in Cu₅Sn₂S₇. Chemistry of Materials, 2021, 33, 9425-9438.	3.2	11
36	Metal Atom Clusters as Building Blocks for Multifunctional Proton-Conducting Materials: Theoretical and Experimental Characterization. Inorganic Chemistry, 2018, 57, 9814-9825.	1.9	10

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37	Promoted crystallisation and cationic ordering in thermoelectric Cu₂₆V₂Sn₆S₃₂ colusite by eccentric vibratory ball milling. Dalton Transactions, 2020, 49, 15828-15836.	1.6	10
38	The Ouzo effect to selectively assemble molybdenum clusters into nanomarbles or nanocapsules with increased HER activity. Chemical Communications, 2018, 54, 13387-13390.	2.2	9
39	Solvent-mediated purification of hexa-molybdenum cluster halide, Cs₂[Mo₆Cl₁₄] for enhanced optical properties. CrystEngComm, 2017, 19, 6028-6038.	1.3	8
40	Low dimensional solids based on Mo₆cluster cyanides and Mn²⁺, Mn³⁺or Cd²⁺metal ions: crystal chemistry, magnetic and optical properties. CrystEngComm, 2018, 20, 3396-3408.	1.3	8
41	Study of the Behavior in Oxidation at High Temperature of Ni, Co and Fe-Base Alloys Containing Very High Fractions of Carbides. Materials Science Forum, 0, 595-598, 871-880.	0.3	7
42	Tailoring Heterometallic Cluster Functional Building Blocks: Synthesis, Separation, Structural and DFT Studies of [Re 6â^' x Mo x Se 8 (CN) 6] n â^'. Chemistry - A European Journal, 2019, 25, 15040-15045.	1.7	7
43	Synergistic Effect of Chemical Substitution and Insertion on the Thermoelectric Performance of Cu₂₆V₂Ge₆S₃₂ Colusite. Inorganic Chemistry, 2021, 60, 11364-11373.	1.9	7
44	Magnetic and magnetocaloric properties of Gd6(Mn1â^'xCox)23 compounds (xÂâ‰Â0.3). Journal of Alloys and Compounds, 2016, 680, 612-616.	2.8	6
45	Unexpected Magnetic Ordering on the Cr Substructure in UCr₂Si₂C and Structural Relationships in Quaternary U-Cr-Si-C Compounds. Inorganic Chemistry, 2018, 57, 2546-2557.	1.9	6
46	Crystal Structure Classification of Copperâ€Based Sulfides as a Tool for the Design of Inorganic Functional Materials. Angewandte Chemie, 2022, 134, .	1.6	6
47	Simulation of crystal and electronic structures of octahedral molybdenum cluster complex compound Cs₂[Mo₆Cl₁₄] using various DFT functionals. Journal of the Ceramic Society of Japan, 2017, 125, 753-759.	0.5	5
48	Stabilization of Ni2+ dimers in hexacyano Mo6 cluster-based Prussian blue derivatives: experimental and theoretical investigations of magnetic properties. Dalton Transactions, 2018, 47, 1122-1130.	1.6	5
49	Copperâ€Rich Thermoelectric Sulfides: Sizeâ€Mismatch Effect and Chemical Disorder in the [TS₄]Cu₆ Complexes of Cu₂₆T₂Ge₆S₃₂ (T=Cr, Mo, W) Colusites. Angewandte Chemie, 2019, 131, 15601-15609.	1.6	5
50	Time-Resolved In Situ Neutron Diffraction Study of Cu22Fe8Ge4S32 Germanite: A Guide for the Synthesis of Complex Chalcogenides. Chemistry of Materials, 2020, 32, 8993-9000.	3.2	4
51	Transport properties and electronic density-of-states of Zn-doped colusite Cu26Cr2Ge6S32. Applied Physics Letters, 2020, 117, 173902.	1.5	4
52	On the Crystal Structures of the Polymorphs of Manganese(II) Chloride Tetrahydrate: Î±-MnCl2Â·4H2O and Î²-MnCl2Â·4H2O. Journal of Chemical Crystallography, 2021, 51, 311-316.	0.5	4
53	Crystal structure of the new A 2 SnTa 6 X 18 (A = K, Rb, Cs; X = Cl, Br) cluster compounds. Journal of Solid State Chemistry, 2018, 257, 72-79.	1.4	3
54	Structural and electronic properties of the metal clusterâ€based compounds including high concentration of solvent molecules. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 751-758.	0.6	3

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55	Microstructures et duretÃ©s d'alliages ternaires de type m-30%cr-0 a 5%c contenant une quantitÃ© croissante de carbures de chrome. partie 1 : alliages Ã base de nickel. Annales De Chimie: Science Des Materiaux, 2010, 35, 291-301.	0.2	3
56	Microstructures at high temperature of Fe-30 wt.% Cr-xC Alloys with x varying from 0 to 2 wt.%. International Journal of Materials Research, 2008, 99, 964-972.	0.1	2
57	Crystal and electronic structures of the new quaternary RCr3Si2C (R=Y, Gdâ€“Tm, Lu, U) compounds. Journal of Solid State Chemistry, 2013, 201, 293-301.	1.4	2
58	Microstructures et duretÃ©s dâ€™alliages ternaires de type M-30% Cr-0 and#224; 5%C contenant une quantitÃ© croissante de carbures de chrome. partie 3 : alliages and#224; base de cobalt. Annales De Chimie: Science Des Materiaux, 2011, 36, 193-204.	0.2	2
59	Crystal Structure of a New Ordered form of Ammonium Hydrogen Succinate NH4HC4H4O4. Journal of Chemical Crystallography, 2020, 50, 35-40.	0.5	1
60	Influence des carbures de chrome sur le comportement thermodilatomÃ©trique dâ€™alliages ternaires base nickel, base cobalt et base fer Ã haute teneur en carbone. Annales De Chimie: Science Des Materiaux, 2009, 34, 61-76.	0.2	1