Romain Gautier

List of Publications by Year
in descending order

68 papers	2,199 citations	331259 21 h-index	223531 46 g-index
77 all docs	77 docs citations	77 times ranked	2996 citing authors

#	Article	IF	Citations
1	Prediction and accelerated laboratory discovery of previously unknown 18-electron ABX compounds. Nature Chemistry, 2015, 7, 308-316.	6.6	349
2	Li substituent tuning of LED phosphors with enhanced efficiency, tunable photoluminescence, and improved thermal stability. Science Advances, 2019, 5, eaav0363.	4.7	153
3	Lead Halide Postâ€Perovskiteâ€Type Chains for Highâ€Efficiency Whiteâ€Light Emission. Advanced Materials, 2019, 31, e1807383.	11.1	147
4	Exciton Self-Trapping in Hybrid Lead Halides: Role of Halogen. Journal of the American Chemical Society, 2019, 141, 12619-12623.	6.6	126
5	The Role of Polar, Lamdba (Î»)-Shaped Building Units in Noncentrosymmetric Inorganic Structures. Journal of the American Chemical Society, 2012, 134, 7679-7689.	6.6	123
6	Structural Confinement toward Giant Enhancement of Red Emission in Mn²⁺â€Based Phosphors. Advanced Functional Materials, 2018, 28, 1804150.	7.8	122
7	Two-Step Design of a Single-Doped White Phosphor with High Color Rendering. Journal of the American Chemical Society, 2017, 139, 1436-1439.	6.6	121
8	Doped Lead Halide White Phosphors for Very High Efficiency and Ultraâ€High Color Rendering. Angewandte Chemie - International Edition, 2020, 59, 2802-2807.	7.2	98
9	Nonlinear Active Materials: An Illustration of Controllable Phase Matchability. Journal of the American Chemical Society, 2013, 135, 11942-11950.	6.6	89
10	Chemical Transformation of Lead Halide Perovskite into Insoluble, Less Cytotoxic, and Brightly Luminescent CsPbBr₃/CsPb₂Br₅ Composite Nanocrystals for Cell Imaging. ACS Applied Materials & Interfaces, 2019, 11, 24241-24246.	4.0	81
11	Synthesis and Photoluminescence Properties of Ca₂Ga₂SiO₇:Eu³⁺ Red Phosphors with an Intense ⁵D₀ â†’ ⁷F₄ Transition. Inorganic Chemistry, 2016, 55, 9144-9146.	1.9	65
12	On the Origin of the Differences in Structure Directing Properties of Polar Metal Oxyfluoride [MO_{<i>x</i>}F_{6â€“<i>x</i>}]^{2â€“} (<i>x</i> = 1, 2) Building Units. Inorganic Chemistry, 2015, 54, 1712-1719.	1.9	44
13	Syntheses of Two Vanadium Oxideâ€“Fluoride Materials That Differ in Phase Matchability. Inorganic Chemistry, 2015, 54, 765-772.	1.9	40
14	Oxygen-Vacancy-Induced Midgap States Responsible for the Fluorescence and the Long-Lasting Phosphorescence of the Inverse Spinel Mg(Mg,Sn)O₄. Chemistry of Materials, 2017, 29, 1069-1075.	3.2	36
15	Orientational order of [VOF5]2â^' and [NbOF5]2â^' polar units in chains. Journal of Solid State Chemistry, 2012, 195, 132-139.	1.4	35
16	Optical activity from racemates. Nature Materials, 2016, 15, 591-592.	13.3	35
17	CsCu₅Se₃: A Copper-Rich Ternary Chalcogenide Semiconductor with Nearly Direct Band Gap for Photovoltaic Application. Chemistry of Materials, 2018, 30, 1121-1126.	3.2	30
18	Spin Frustration from <i>cis</i>-Edge or -Corner Sharing Metal-Centered Octahedra. Journal of the American Chemical Society, 2013, 135, 19268-19274.	6.6	27

#	Article	IF	Citations
19	Redox and phase behavior of Pd-substituted (La,Sr)CrO3 perovskite solid oxide fuel cell anodes. Solid State Ionics, 2016, 296, 90-105.	1.3	26
20	Screening Approach for the Discovery of New Hybrid Perovskites with Efficient Photoemission. Advanced Functional Materials, 2019, 29, 1806728.	7.8	26
21	A Chemical Route Towards Singleâ€Phase Materials with Controllable Photoluminescence. Angewandte Chemie - International Edition, 2015, 54, 11501-11503.	7.2	25
22	Kirkendall Effect vs Corrosion of Silver Nanocrystals by Atomic Oxygen: From Solid Metal Silver to Nanoporous Silver Oxide. Journal of Physical Chemistry C, 2017, 121, 19497-19504.	1.5	22
23	From Racemic Units to Polar Materials. Crystal Growth and Design, 2012, 12, 6267-6271.	1.4	21
24	Preservation of Chirality and Polarity between Chiral and Polar Building Units in the Solid State. Inorganic Chemistry, 2012, 51, 10613-10618.	1.9	20
25	From Solution to the Solid State: Control of Niobium Oxideâ€“Fluoride [NbO_{<i>x</i>}F_{<i>y</i>}]^{<i>n</i>âˆ’} Species. Inorganic Chemistry, 2014, 53, 537-542.	1.9	20
26	Modulation of Defects in Semiconductors by Facile and Controllable Reduction: The Case of p-type CuCrO₂ Nanoparticles. Inorganic Chemistry, 2016, 55, 7729-7733.	1.9	20
27	Doped Lead Halide White Phosphors for Very High Efficiency and Ultraâ€High Color Rendering. Angewandte Chemie, 2020, 132, 2824-2829.	1.6	19
28	Specific Chemistry of the Anions: [TaOF₅]^{2â€“}, [TaF₆]^{âˆ’}, and [TaF₇]^{2â€“}. Crystal Growth and Design, 2014, 14, 844-850.	1.4	18
29	Alignment of Acentric Units in Infinite Chains: A â€œLock and Keyâ€•Model. Crystal Growth and Design, 2013, 13, 4084-4091.	1.4	16
30	DFT-assisted structure determination of Î±1- and Î±2-VOPO4: new insights into the understanding of the catalytic performances of vanadium phosphates. Dalton Transactions, 2013, 42, 8124.	1.6	16
31	The dimeric [V2O2F8]4âˆ’ anion: Structural characterization of a magnetic basic-building-unit. Journal of Solid State Chemistry, 2013, 200, 105-109.	1.4	15
32	Thermochromic Luminescent Materials and Multi-Emission Bands in d10 Clusters. Scientific Reports, 2017, 7, 45537.	1.6	15
33	Tuning the Crystal Structure Dimensionality of Cobalt(II)/1,2,4-Triazole Complexes. Crystal Growth and Design, 2017, 17, 864-869.	1.4	14
34	Hydrogen Bonding and Broad-Band Emission in Hybrid Zinc Halide Phosphors. Inorganic Chemistry, 2020, 59, 2626-2630.	1.9	14
35	Machine Learning Guided Design of Singleâ€“Phase Hybrid Lead Halide White Phosphors. Advanced Science, 2021, 8, e2101407.	5.6	14
36	Synthesis and Magnetic Properties of Î²â€KVOF₃. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 1109-1114.	0.6	13

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37	VOPO4Â·H2O: A Stacking Faults Structure Studied by X-ray Powder Diffraction and DFT-D Calculations. Inorganic Chemistry, 2011, 50, 4378-4383.	1.9	12
38	Electron spin resonance in three spin-12dimer systems:VO(HPO4)â‹…0.5H2O,KZn(H2O)(VO)2(PO4)2(H2PO4), andCsV2O5. Physical Review B, 2010, 81, .	1.1	11
39	A p-Type Zinc-Based Metalâ€"Organic Framework. Inorganic Chemistry, 2017, 56, 6208-6213.	1.9	9
40	Packing of Helices: Is Chirality the Highest Crystallographic Symmetry?. Crystals, 2016, 6, 106.	1.0	8
41	Pillared sulfonate-based metal-organic framework as negative electrode for Li-ion batteries. Materials Letters, 2019, 236, 73-76.	1.3	8
42	Cyclohexylammonium sulfanilate: A simple representative of the chiral materials containing only achiral building units. Materials Letters, 2019, 241, 6-9.	1.3	7
43	Role of specific distorted metal complexes in exciton self-trapping for hybrid metal halides. Chemical Communications, 2020, 56, 10139-10142.	2.2	7
44	NMR study of the LiMnPO4Â·OH and MPO4Â·H2O (M=Mn, V) homeotypic phases and DFT calculations. Solid State Nuclear Magnetic Resonance, 2012, 42, 42-50.	1.5	6
45	Fineâ€Tuning the Properties of Doped Multifunctional Materials by Controlled Reduction of Dopants. Chemistry - A European Journal, 2017, 23, 2998-3001.	1.7	6
46	Tuning the oxidation states of dopants in Li2SrSiO4:Eu,Ce and control of the photoemission color. Journal of Solid State Chemistry, 2020, 288, 121367.	1.4	6
47	Tuning the Oxidation States of Dopants: A Strategy for the Modulation of Material Photoluminescence Properties. Chemistry - A European Journal, 2021, 27, 905-914.	1.7	6
48	One pot-synthesis of the fourth category of dinuclear molybdenum(VI) oxalate series: Structure and study of thermal and redox properties. Inorganica Chimica Acta, 2019, 491, 84-92.	1.2	5
49	The crucial impact of cerium reduction on photoluminescence. Applied Materials Today, 2020, 20, 100643.	2.3	5
50	Patterning of silver on the micro- and nano-scale by local oxidation using air plasma. Nano Structures Nano Objects, 2019, 19, 100320.	1.9	4
51	Direct nanopatterning of polymer/silver nanoblocks under low energy electron beam irradiation. Nanoscale, 2016, 8, 17108-17112.	2.8	3
52	Stabilization of Î²-octamolybdate with large counterions. Journal of Molecular Structure, 2017, 1141, 698-702.	1.8	3
53	Machine learning identification of experimental conditions for the synthesis of single-phase white phosphors. Matter, 2021, 4, 3967-3976.	5.0	3
54	A Chiral 3D Silver(I)-Benzenedithiolate Coordination Polymer exhibiting Photoemission and Non Linear Optical Response. Chemical Communications, 0, , .	2.2	3

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55	Two Distinct Cu(II)â€"V(IV) Superexchange Interactions with Similar Bond Angles in a Triangular â€œCuV₂â€•Fragment. Inorganic Chemistry, 2022, 61, 10234-10241.	1.9	3
56	Two caesium vanadium hydrogenphosphates with tunnelled structures: Cs₂V₂O₃(PO₄)(HPO₄) and Cs₂[(VO)₃(HPO₄)₄(H₂O)]Â·H₂O. Acta Crystallographica Section C: Crystal Structure Communications, 2010, 66, i12-i15.	0.4	2
57	Influence of the cation size on the second harmonic generation response of chiral A(VO2)2(PO4)Â·3H2O (A = K+, NH4+ and Rb+). CrystEngComm, 2014, 16, 10902-10906.	1.3	2
58	Structural and Spectroscopic Investigations of Two [Cu4X6]2â€" (X = Clâ€", Brâ€") Clusters: A Joint Theoretical and Experimental Work. Journal of Physical Chemistry A, 2018, 122, 4628-4634.	1.1	2
59	Role of the organic counterions on the protonation of Strandberg-type phosphomolybdates. Polyhedron, 2020, 191, 114795.	1.0	2
60	Templating effect of <i>trans</i>-2,5-dimethylpiperazine (TDMP) on the structural dimensionality of hybrid metal halides. Dalton Transactions, 2022, 51, 10758-10762.	1.6	2
61	Hydrothermal Synthesis of Two Cuprous Bromide Compounds Using Zinc Metal as Reductant. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 744-748.	0.6	1
62	Analysis and Prediction of Stacking Sequences in Intercalated Lamellar Vanadium Phosphates. European Journal of Inorganic Chemistry, 2015, 2015, 1941-1945.	1.0	1
63	Crystal structure of (Î¼-<i>trans</i>-1,2-bis{2-[(2-oxidophenyl)methylidene]hydrazin-1-ylidene}ethane-1,2-diolato-Îº³) Tj ETQq1 1 0.784314 rg Crystallographic Communications, 2018, 74, 799-802.	0.2	1
64	Cocrystallization through the use of a salt: The case of thiourea with a new propanediammonium oxalate salt. Journal of Crystal Growth, 2019, 528, 125267.	0.7	1
65	Synthesis, crystal structure and electrochemical properties of a new methylammonium sodium decavanate salt Na3(CH3NH3)3[V10O28].(CH3NH2).14H2O. Journal of Molecular Structure, 2022, 1254, 132321.	1.8	1
66	Reply to Comment on â€œOxygen-Vacancy-Induced Midgap States Responsible for the Fluorescence and the Long-Lasting Phosphorescence of the Inverse Spinel Mg(Mg,Sn)O₄â€• Chemistry of Materials, 2020, 32, 7568-7568.	3.2	0
67	Tuning the emission color and temperature range of dual-mode luminescent thermometer by dopant valence states control. Applied Materials Today, 2022, 26, 101349.	2.3	0
68	A new combined approach to investigate stacking faults in lamellar compounds. , 2011, , 49-54.		0