

Hans Hagemann

List of Publications by Year in descending order

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188
papers

5,896
citations

71102
41
h-index

95266
68
g-index

210
all docs

210
docs citations

210
times ranked

4295
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Magnesium Borohydride: Synthesis and Crystal Structure. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 5765-5767. | 13.8 | 182 |
| 2 | Structural and spectroscopic studies on the alkali borohydrides MBH ₄ (M = Na, K, Rb, Cs). <i>Journal of Alloys and Compounds</i> , 2004, 375, 98-106. | 5.5 | 176 |
| 3 | Porous and Dense Magnesium Borohydride Frameworks: Synthesis, Stability, and Reversible Absorption of Guest Species. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11162-11166. | 13.8 | 175 |
| 4 | Electron-Phonon Interaction and Charge Carrier Mass Enhancement inSrTiO_3. <i>Physical Review Letters</i> , 2008, 100, 226403. | 7.8 | 174 |
| 5 | Structure and properties of complex hydride perovskite materials. <i>Nature Communications</i> , 2014, 5, 5706. | 12.8 | 168 |
| 6 | Insight into Mg(BH ₄) ₂ with Synchrotron X-ray Diffraction: Structure Revision, Crystal Chemistry, and Anomalous Thermal Expansion. <i>Chemistry of Materials</i> , 2009, 21, 925-933. | 6.7 | 164 |
| 7 | LiSc(BH ₄) ₄ : A Novel Salt of Li ⁺ and Discrete Sc(BH ₄) ₄ ⁻ Complex Anions. <i>Journal of Physical Chemistry A</i> , 2008, 112, 7551-7555. | 2.5 | 154 |
| 8 | NaSc(BH ₄) ₄ : A Novel Scandium-Based Borohydride. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1357-1364. | 3.1 | 137 |
| 9 | A highly stable sodium solid-state electrolyte based on a dodeca/deca-borate equimolar mixture. <i>Chemical Communications</i> , 2017, 53, 4195-4198. | 4.1 | 137 |
| 10 | Raman spectra of single crystal CuO. <i>Solid State Communications</i> , 1990, 73, 447-451. | 1.9 | 133 |
| 11 | Pressure and Temperature Influence on the Desorption Pathway of the LiBH ₄ -MgH ₂ Composite System. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15212-15217. | 3.1 | 127 |
| 12 | A stable 3 V all-solid-state sodium-ion battery based on a <i>clososilicate</i> -borate electrolyte. <i>Energy and Environmental Science</i> , 2017, 10, 2609-2615. | 30.8 | 120 |
| 13 | Structure and Properties of NaBH ₄ -H ₂ O and NaBH ₄ . <i>European Journal of Inorganic Chemistry</i> , 2008, 2008, 3127-3133. | 2.0 | 115 |
| 14 | Status and prospects of hydroborate electrolytes for all-solid-state batteries. <i>Energy Storage Materials</i> , 2020, 25, 782-794. | 18.0 | 112 |
| 15 | Lithium boro-hydride LiBH ₄ . <i>Journal of Alloys and Compounds</i> , 2002, 346, 206-210. | 5.5 | 108 |
| 16 | Synthesis of a Bimetallic Dodecaborate LiNaB ₁₂ H ₁₂ with Outstanding Superionic Conductivity. <i>Chemistry of Materials</i> , 2015, 27, 5483-5486. | 6.7 | 97 |
| 17 | Structure and Characterization of KSc(BH ₄) ₄ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 19540-19549. | 3.1 | 95 |
| 18 | Raman studies of reorientation motions of [BH ₄] ⁻ anions in alkali borohydrides. <i>Journal of Alloys and Compounds</i> , 2004, 363, 129-132. | 5.5 | 92 |

| # | ARTICLE | | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-----------|
| 19 | Structure and crystallization of n-C ₂₁ H ₄₄ , n-C ₃₆ H ₇₄ , and low-molecular-weight polyethylene glasses. <i>Macromolecules</i> , 1987, 20, 2810-2819. | | 4.8 | 87 |
| 20 | FT-IR spectra of inorganic borohydrides. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 128, 902-906. | | 3.9 | 83 |
| 21 | Synthetic approaches to inorganic borohydrides. <i>Dalton Transactions</i> , 2010, 39, 6006. | | 3.3 | 81 |
| 22 | The First Crystallographic and Spectroscopic Characterization of a 3 <i>i>d</i>-Metal Borohydride: Mn(BH₄)₂. <i>Journal of Physical Chemistry C</i>, 2009, 113, 9003-9007.</i> | | 3.1 | 77 |
| 23 | Bimetallic Borohydrides in the System <i>i>M</i>(BH₄)₂ (<i>i>M</i> = Mg, Mn): On the Structural Diversity. <i>Journal of Physical Chemistry C</i>, 2012, 116, 10829-10840.</i></i> | | 3.1 | 69 |
| 24 | Electrochemical Oxidative Stability of Hydroborate-Based Solid-State Electrolytes. <i>ACS Applied Energy Materials</i> , 2019, 2, 6924-6930. | | 5.1 | 68 |
| 25 | Effects of milling, doping and cycling of NaAlH ₄ studied by vibrational spectroscopy and X-ray diffraction. <i>Journal of Alloys and Compounds</i> , 2005, 390, 305-313. | | 5.5 | 67 |
| 26 | Al ₃ Li ₄ (BH ₄) ₁₃ : A Complex Doubleâ€Cation Borohydride with a New Structure. <i>Chemistry - A European Journal</i> , 2010, 16, 8707-8712. | | 3.3 | 66 |
| 27 | 4 V room-temperature all-solid-state sodium battery enabled by a passivating cathode/hydroborate solid electrolyte interface. <i>Energy and Environmental Science</i> , 2020, 13, 5048-5058. | | 30.8 | 61 |
| 28 | Pronounced Electrochemical Amphotericity of a Fused Donorâ€Acceptor Compound: A Planar Merge of TTF with a TCNQâ€T Type Bithienoquinoxaline. <i>Chemistry - A European Journal</i> , 2009, 15, 63-66. | | 3.3 | 58 |
| 29 | Spectroscopic Study of a Single Crystal of SrAl ₂ O ₄ :Eu ²⁺ :Dy ³⁺ . <i>Journal of Physical Chemistry C</i> , 2019, 123, 8607-8613. | | 3.1 | 57 |
| 30 | Solvent and Spectral Effects in the Ultrafast Charge Recombination Dynamics of Excited Donorâ€Acceptor Complexes. <i>Journal of Physical Chemistry A</i> , 2008, 112, 594-601. | | 2.5 | 54 |
| 31 | Ionic Conduction Mechanism in the Na ₂ (B ₁₂ H ₁₂) _{0.5} (B ₁₀ H ₁₀) _{0.5} -closo-Borate Solid-State Electrolyte: Interplay of Disorder and Ionâ€Ion Interactions. <i>Chemistry of Materials</i> , 2019, 31, 3449-3460. | 6.7 | 54 | |
| 32 | Vibrational Spectra of Ca(BH ₄) ₂ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 11575-11579. | | 3.1 | 53 |
| 33 | AZn ₂ (BH ₄) ₅ (A = Li, Na) and NaZn(BH ₄) ₃ : Structural Studies. <i>Journal of Physical Chemistry C</i> , 2010, 114, 19127-19133. | | 3.1 | 53 |
| 34 | Hydrogenâ€fluorine exchange in NaBH ₄ -NaBF ₄ . <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 18185. | | 2.8 | 52 |
| 35 | Crystallization of closo-borate electrolytes from solution enabling infiltration into slurry-casted porous electrodes for all-solid-state batteries. <i>Energy Storage Materials</i> , 2020, 26, 543-549. | | 18.0 | 50 |
| 36 | Nuclear Magnetic Resonance Study of Reorientational Motion in $\tilde{\tau}$ -Mg(BH ₄) ₂ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 12370-12374. | | 3.1 | 49 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | MgxMn(1-x)(BH4)2 ($x=0.8$), a cation solid solution in a bimetallic borohydride. <i>Acta Materialia</i> , 2011, 59, 5171-5180. | 7.9 | 47 |
| 38 | Experimental Raman scattering investigation of phonon anharmonicity effects in. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 2155-2169. | 1.8 | 46 |
| 39 | Oxadiazole based bipolar host materials employing planarized triarylamine donors for RGB PHOLEDs with low efficiency roll-off. <i>Journal of Materials Chemistry C</i> , 2014, 2, 2069-2081. | 5.5 | 43 |
| 40 | Lattice anharmonicity and structural evolution of LiBH ₄ : an insight from Raman and X-ray diffraction experiments. <i>Phase Transitions</i> , 2009, 82, 344-355. | 1.3 | 42 |
| 41 | Effect of additives on the synthesis and reversibility of Ca(BH ₄) ₂ . <i>Journal of Alloys and Compounds</i> , 2010, 493, 281-287. | 5.5 | 41 |
| 42 | Thermal and concentration dependent energy transfer of Eu ²⁺ in SrAl ₂ O ₄ . <i>Optical Materials Express</i> , 2016, 6, 793. | 3.0 | 37 |
| 43 | Polarized Raman spectra of beryl and bazzite. <i>Physics and Chemistry of Minerals</i> , 1990, 17, 395. | 0.8 | 36 |
| 44 | The influence of boric acid on improved persistent luminescence and thermal oxidation resistance of SrAl ₂ O ₄ :Eu ²⁺ . <i>Journal of Luminescence</i> , 2015, 167, 126-131. | 3.1 | 36 |
| 45 | Dynamics of the Coordination Complexes in a Solid-State Mg Electrolyte. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6450-6455. | 4.6 | 36 |
| 46 | Fermi Resonances of Borohydrides in a Crystalline Environment of Alkali Metals. <i>Journal of Physical Chemistry A</i> , 2006, 110, 9927-9933. | 2.5 | 35 |
| 47 | Europium doped BaMgF ₄ , an EPR and optical investigation. <i>Journal of Alloys and Compounds</i> , 1998, 268, 60-65. | 5.5 | 33 |
| 48 | Polarized Raman and hyperpolarizability studies of Hydroxyethylammonium (I) tartrate monohydrate for quadratic nonlinear optics. <i>Journal of Molecular Structure</i> , 2011, 988, 17-23. | 3.6 | 33 |
| 49 | NMR Study of Reorientational Motion in Alkaline-Earth Borohydrides: $\tilde{\Gamma}^2$ and $\tilde{\Gamma}^3$ Phases of Mg(BH ₄) ₂ and $\tilde{\Gamma}_{\pm}$ and $\tilde{\Gamma}^2$ Phases of Ca(BH ₄) ₂ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 4913-4920. | 3.1 | 33 |
| 50 | A mixed-cation mixed-anion borohydride NaY(BH ₄) ₂ Cl ₂ . <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8428-8438. | 7.1 | 33 |
| 51 | Unusual behavior of the Gd ESR in single crystals of GdyY _{1-x} Ba ₂ Cu ₃ O _{6+x} with $x=0.1 \rightarrow 0.8$ and $y=0.03 \rightarrow 0.06$: Evidence for magnetic interaction in the superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1989, 161, 13-20. | 1.2 | 31 |
| 52 | Growth of single crystals, thermal dependency of lattice parameters and Raman scattering in the Nd _{2-x} Ce _x CuO ₄₋₁ system. <i>Physica C: Superconductivity and Its Applications</i> , 1990, 170, 103-111. A theoretical study of the spectroscopic properties of $\tilde{\Gamma}_2$ and $\tilde{\Gamma}_3$ in a series of borohydrides xmins:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" | 1.2 | 31 |
| 53 | species ($x=1 \rightarrow 12$, $y=3 \rightarrow 14$, $z=0 \rightarrow 2$): From BH ₃ to B ₁₂ xmins:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mtext>H</mml:mtext><mml:mi>y</mml:mi><mml:mrow><mml:mi>z</mml:mi></mml:mrow></mml:msubsup></mml:mrow></mml:math> | 7.1 | 31 |
| 54 | Wavelength dependent loading of traps in the persistent phosphor SrAl ₂ O ₄ :Eu ²⁺ , Dy ³⁺ . <i>Journal of Luminescence</i> , 2016, 170, 299-304. | 3.1 | 31 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Nanostructured thin-film tungsten trioxide photoanodes for solar water and sea-water splitting., 2006, . | 30 | |
| 56 | Fluoride substitution in LiBH ₄ ; destabilization and decomposition. Physical Chemistry Chemical Physics, 2017, 19, 30157-30165. | 2.8 | 30 |
| 57 | Quantitative Assessment of B ⁻ B ⁻ B, B ⁻ H _b b ⁻ , and B ⁻ H _t t ⁻ Bonds: From BH ₃ to B ₁₂ H ₁₂ ²⁻ . ChemPhysChem, 2019, 20, 1967-1977. | 2.1 | 30 |
| 58 | New fundamental experimental studies on $\hat{I}\pm\text{Mg}(\text{BH}_4)_2$ and other borohydrides. Journal of Alloys and Compounds, 2011, 509, S688-S690. | 5.5 | 29 |
| 59 | An alternative approach to the synthesis of NaB ₃ H ₈ and Na ₂ B ₁₂ H ₁₂ for solid electrolyte applications. International Journal of Hydrogen Energy, 2017, 42, 22417-22421. | 7.1 | 29 |
| 60 | Single crystal ESR studies on tetragonal YBa ₂ Cu ₃ O _{6+x} . Physica C: Superconductivity and Its Applications, 1989, 158, 424-432. | 1.2 | 27 |
| 61 | Thermal Desorption, Vibrational Spectroscopic, and DFT Computational Studies of the Complex Manganese Borohydrides Mn(BH ₄) ₂ and [Mn(BH ₄) ₄] ₂ ²⁻ . Journal of Physical Chemistry C, 2010, 114, 15516-15521. | 3.1 | 27 |
| 62 | Low-lying phonons in $\text{Na}_{4}\text{B}_{12}\text{H}_{12}$ by inelastic scattering of synchrotron radiation. Physical Review B, 2008, 78, . | 1.2 | 26 |
| 63 | Halide Free M(BH ₄) ₂ (M = Sr, Ba, and Eu) Synthesis, Structure, and Decomposition. Inorganic Chemistry, 2016, 55, 7090-7097. | 4.0 | 26 |
| 64 | Direct Solution-Based Synthesis of Na ₄ (B ₁₂ H ₁₂) ₂ (B ₁₀ H ₁₀) ₂ Solid Electrolyte. ChemSusChem, 2019, 12, 4832-4837. | 6.8 | 26 |
| 65 | Probing traps in the persistent phosphor SrAl ₂ O ₄ :Eu ²⁺ ,Dy ³⁺ ,B ³⁺ - A wavelength, temperature and sample dependent thermoluminescence investigation. Journal of Luminescence, 2020, 222, 117113. | 3.1 | 26 |
| 66 | Inhomogeneous broadening of optical spectra in mixed crystals: Basic model and its application to Sm ²⁺ in SrFCl _x Br _{1-x} . Journal of Chemical Physics, 1994, 101, 10323-10337. | 3.0 | 25 |
| 67 | Synthesis and Structure of Ba ₁₂ F ₁₉ Cl ₅ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1996, 622, 343-347. | 1.2 | 25 |
| 68 | Synthesis and Structure of Ba ₇ F ₁₂ Cl ₂ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1999, 625, 643-649. | 1.2 | 25 |
| 69 | Effect of temperature and pressure on emission lifetime of Sm ²⁺ ion doped in M _x F _y (M=Sr, Ba; X=Br, I) crystals. Journal of Luminescence, 2013, 142, 66-74. | 3.1 | 25 |
| 70 | Boron Hydrogen Compounds: Hydrogen Storage and Battery Applications. Molecules, 2021, 26, 7425. | 3.8 | 25 |
| 71 | Novel sodium aluminium borohydride containing the complex anion [Al(BH ₄ ,Cl) ₄] ⁻ . Faraday Discussions, 2011, 151, 231. | 3.2 | 24 |
| 72 | Experimental evidence of librational vibrations determining the stability of calcium borohydride. Physical Review B, 2011, 83, . | 3.2 | 24 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | The influence of silica surface groups on the Li-ion conductivity of LiBH ₄ /SiO ₂ nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22456-22466. | 2.8 | 24 |
| 74 | The Periodate-Based Double Perovskites $\text{M}(\text{IO}_6)_2$ (M = Ca, Sr, and) T _{1.2} O ₂ Q _{0.0} rgBT /Overlaid | 1.2 | 23 |
| 75 | Deuterium-Hydrogen Exchange in Solid Mg(BH ₄) ₂ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 10045-10047. | 3.1 | 22 |
| 76 | Crystal Chemistry in the Barium Fluoride Chloride System. <i>Crystal Growth and Design</i> , 2012, 12, 1124-1131. | 3.0 | 22 |
| 77 | Improved persistent luminescence of CaTiO ₃ :Pr by fluorine substitution and thermochemical treatment. <i>Journal of Alloys and Compounds</i> , 2014, 613, 338-343. | 5.5 | 22 |
| 78 | Pressure-induced phase transitions in Na ₂ B ₁₂ H ₁₂ , structural investigation on a candidate for solid-state electrolyte. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2019, 75, 406-413. | 1.1 | 22 |
| 79 | A Vibrational Study of Some 1,2,4-Trioxanes. <i>Helvetica Chimica Acta</i> , 1988, 71, 992-999. | 1.6 | 19 |
| 80 | Crystallochemical study of mixed strontium-barium fluorohalides. <i>Materials Research Bulletin</i> , 1993, 28, 353-362. | 5.2 | 19 |
| 81 | Observation of ESR in the Bi high-T _c superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1989, 157, 240-246. | 1.2 | 18 |
| 82 | Where does the Raman optical activity of [Rh(en) ₃] ³⁺ come from? Insight from a combined experimental and theoretical approach. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 23260-23273. | 2.8 | 18 |
| 83 | Reaction Pathways in Ca(BH ₄) ₂ -NaNH ₂ and Mg(BH ₄) ₂ -NaNH ₂ Hydrogen-Rich Systems. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8428-8435. | 3.1 | 18 |
| 84 | Spectroscopic properties of Dy ³⁺ - and Dy ³⁺ , B ³⁺ - doped SrAl ₂ O ₄ . <i>Optical Materials</i> , 2019, 89, 268-275. | 3.6 | 18 |
| 85 | Study of the TâŠ–t Jahn-Teller effect : ESR of Ag ²⁺ in the alkaline earth fluorides. <i>Solid State Communications</i> , 1989, 70, 511-516. | 1.9 | 17 |
| 86 | Ionic layered BaFCl and $\text{Ba}(\text{FCl})_n$ Physical- and chemical-pressure effects. <i>Physical Review B</i> , 2010, 82, . | 17 | 17 |
| 87 | CO ₂ -promoted hydrolysis of KBH ₄ for efficient hydrogen co-generation. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19603-19608. | 7.1 | 17 |
| 88 | Thermal Conversion of Unsolvated Mg(BH ₄) ₂ to BH ₄ ⁿ in the Presence of MgH ₂ . <i>ACS Applied Energy Materials</i> , 2021, 4, 3737-3747. | 5.1 | 17 |
| 89 | Synthesis, crystal structures and spectroscopic investigations on samarium-doped mixed BaI _{1-x} gdSr _x MgF ₄ crystals. <i>Materials Research Bulletin</i> , 1997, 32, 263-269. | 5.2 | 16 |
| 90 | transitions of Sm ²⁺ in SrMgF ₄ :Sm ²⁺ . <i>Journal of Alloys and Compounds</i> , 2004, 374, 194-196. | 5.5 | 16 |

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|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Sm ²⁺ as a probe of crystal field in fluorides and fluorohalides: Effect of pressure and temperature. Journal of Alloys and Compounds, 2008, 451, 74-76. | 5.5 | 16 |
| 92 | Cation Size and Anion Anisotropy in Structural Chemistry of Metal Borohydrides. The Peculiar Pressure Evolution of RbBH ₄ . Inorganic Chemistry, 2010, 49, 5285-5292. | 4.0 | 16 |
| 93 | Theoretical study of $\text{B}_{12}\text{H}_{10}$. International Journal of Hydrogen Energy, 2015, 40, 12721-12726. | | |
| 94 | Isotope Exchange Reactions in Ca(BH ₄) ₂ . Journal of Physical Chemistry C, 2015, 119, 29-32. | 3.1 | 16 |
| 95 | The influence of ionothermal synthesis using BmimBF ₄ as a solvent on nanophosphor BaFBr:Eu ²⁺ photoluminescence. Nanoscale, 2018, 10, 19706-19710. | 5.6 | 16 |
| 96 | Raman spectroscopic study of EtNH ₃ X (X=Cl,Br) and several deuterated analogs. Journal of Chemical Physics, 1984, 80, 111-118. | 3.0 | 15 |
| 97 | EPR and optical investigation of europium doped Ba ₂ Mg ₃ F ₁₀ . Journal of Alloys and Compounds, 1998, 274, 164-168. | 5.5 | 15 |
| 98 | Raman spectroscopy studies on M ₂ RuH ₆ where M=Ca, Sr and Eu. Journal of Alloys and Compounds, 2002, 330-332, 296-300. | 5.5 | 15 |
| 99 | Modified ene-yne compounds: a novel functional material with nonlinear optical properties. CrystEngComm, 2011, 13, 7194. | 2.6 | 15 |
| 100 | Structural and vibrational properties of Ca ₂ FeH ₆ and Sr ₂ RuH ₆ . Journal of Physics and Chemistry of Solids, 2011, 72, 286-289. | 4.0 | 15 |
| 101 | Effect of pressure on the free ion and crystal field parameters of Sm ²⁺ in BaFBr and SrFBr hosts. Journal of Luminescence, 2013, 134, 678-685. | 3.1 | 15 |
| 102 | Improved photoluminescence and afterglow of CaTiO ₃ :Pr ³⁺ by ammonia treatment. Optical Materials Express, 2013, 3, 248. | 3.0 | 15 |
| 103 | Raman spectroscopic study of structural phase transitions in the layer crystals (EtNH ₃) ₂ MCl ₄ with M=Cd and Mn. Journal of Physics C: Solid State Physics, 1985, 18, 6441-6456. | 1.5 | 14 |
| 104 | Synthesis and Structure of the Disordered Modification of Pb ₇ F ₁₂ Cl ₂ . Journal of Solid State Chemistry, 2000, 149, 56-59. | 2.9 | 14 |
| 105 | The influence of defects formed by Ca excess and thermal post-treatments on the persistent luminescence of CaTiO ₃ :Pr. Optical Materials Express, 2012, 2, 405. | 3.0 | 14 |
| 106 | Europium-Doped Ba ₇ F ₁₂ Cl ₂ , a Single Component Near-UV Excited Tunable White Phosphor. Journal of Physical Chemistry C, 2015, 119, 141-147. | 3.1 | 14 |
| 107 | Controlling singlet-triplet splitting in carbazole-oxadiazole based bipolar phosphorescent host materials. Organic Electronics, 2015, 17, 216-228. | 2.6 | 14 |
| 108 | Di-hydrogen contact induced lattice instabilities and structural dynamics in complex hydride perovskites. Journal of Physics Condensed Matter, 2015, 27, 265403. | 1.8 | 14 |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|-----------|
| 109 | Theoretical Study of Halogenated B ₁₂ H _n X ₂ (12–n) (X = F, Cl, Br). Journal of Physical Chemistry A, 2019, 123, 1807-1813. | | 2.5 | 14 |
| 110 | Boron Hydrogen Compounds for Hydrogen Storage and as Solid Ionic Conductors. Chimia, 2019, 73, 868. | | 0.6 | 14 |
| 111 | Crystallochemical and optical study of mixed alkaline earth-samarium fluorohalides of the lead fluoride chloride type. Materials Research Bulletin, 1995, 30, 405-412. | | 5.2 | 12 |
| 112 | First-principles study of the pressure dependence of the structural and vibrational properties of the ternary metal hydride Ca ₂ RuH ₆ . Physical Review B, 2007, 76, . | | 3.2 | 12 |
| 113 | Photoluminescence of nanocrystalline SrMgF ₄ prepared by a solution chemical route. Materials Research Bulletin, 2008, 43, 168-175. | | 5.2 | 12 |
| 114 | Vibrational spectra and structure of borohydrides. Journal of Alloys and Compounds, 2013, 580, S122-S124. | | 5.5 | 12 |
| 115 | Computational study of the vibrational spectroscopy properties of boron-hydrogen compounds: Mg(B ₃ H ₈) ₂ , CB ₉ H ₁₀ and CB ₁₁ H ₁₂ . International Journal of Hydrogen Energy, 2017, 42, 22496-22501. | | 7.1 | 12 |
| 116 | Experimental investigation of Mg(B ₃ H ₈) ₂ dimensionality, materials for energy storage applications. Dalton Transactions, 2020, 49, 12168-12173. | | 3.3 | 12 |
| 117 | Synthesis and Structure of Ba ₆ Mg ₇ F ₂₆ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1997, 623, 573-578. | | 1.2 | 11 |
| 118 | Study of the Solid-Liquid Equilibrium in Mixed Alkaline Earth Fluorohalides. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 1999, 57, 193-202. | | 1.4 | 11 |
| 119 | Synthesis and Structure of the Ordered Modification of Ba ₆ EuF ₁₂ Cl ₂ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2000, 626, 1721-1722. | | 1.2 | 11 |
| 120 | Synthesis and Structure of the new Fluoride Bromide Ba _{6.668(2)} Ca _{0.332(2)} F ₁₂ Br ₂ and Solid Solutions with Composition Ba _{7-y} x _x CaxF ₁₂ (ClyBr _{1-y}) ₂ with x = 0.5, 0 < y < 1. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2004, 630, 1484-1488. | | 1.2 | 11 |
| 121 | Magnetic properties of the tetragonal RCuGa ₃ (R=Pr, Nd and Gd) single crystals. Journal of Magnetism and Magnetic Materials, 2015, 386, 37-43. | | 2.3 | 11 |
| 122 | Reorientational Hydrogen Dynamics in Complex Hydrides with Enhanced Li ⁺ Conduction. Journal of Physical Chemistry C, 2017, 121, 17693-17702. | | 3.1 | 11 |
| 123 | Effect of excitation wavelength (blue vs near UV) and dopant concentrations on afterglow and fast decay of persistent phosphor SrAl ₂ O ₄ :Eu ²⁺ ,Dy ³⁺ . Journal of Rare Earths, 2022, 40, 1022-1028. | | 4.8 | 11 |
| 124 | Synthesis and Crystal Structures of a Stable, a Metastable and a High Temperature Modification of Pb ₂ Na ₁₀ O ₆ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 3184-3189. | | 1.2 | 10 |
| 125 | Temperature and host dependence of the transition interference between f-f and f-d transitions of Sm ²⁺ in matlockites. Journal of Luminescence, 2015, 161, 323-329. | | 3.1 | 10 |
| 126 | Quantitative Spectra-Structure Relations for Borohydrides. Journal of Physical Chemistry C, 2015, 119, 21868-21874. | | 3.1 | 10 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Synthesis and Structure of Mixed Ba ₁₂ F ₁₉ Cl?Br ₅ ? Crystals. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1996, 622, 1374-1380. | 1.2 | 9 |
| 128 | Synthesis and Characterization of NaBD ₃ H, A Potential Structural Probe for Hydrogen Storage Materials. Journal of Physical Chemistry A, 2009, 113, 13932-13936. | 2.5 | 9 |
| 129 | Raman Spectroscopy Measurements of the Pressureâ?Temperature Behavior of LiAlH ₄ . Journal of Physical Chemistry C, 2010, 114, 11991-11997. | 3.1 | 9 |
| 130 | Accurate Computational Thermodynamics Using Anharmonic Density Functional Theory Calculations: The Case Study of Bâ€“H Species. ACS Omega, 2019, 4, 8786-8794. | 3.5 | 9 |
| 131 | Probing the local symmetry of Tb ³⁺ in borohydrides using luminescence spectroscopy. Journal of Luminescence, 2020, 221, 117065. | 3.1 | 9 |
| 132 | Fundamental Loadingâ€Curve Characteristics of the Persistent Phosphor SrAl ₂ O ₄ :Eu ²⁺ ,Dy ³⁺ ,B ³⁺ : The Effect of Temperature and Excitation Density. Advanced Photonics Research, 2022, 3, . | 3.6 | 9 |
| 133 | Raman investigation on structural phase transitions in (C ₂ H ₅ NH ₃) ₂ CdCl ₄ . Chemical Physics Letters, 1982, 93, 582-585. | 2.6 | 8 |
| 134 | Raman investigation of 1,4-cyclohexadiene in the liquid and solid state. Spectrochimica Acta Part A: Molecular Spectroscopy, 1985, 41, 751-756. | 0.1 | 8 |
| 135 | Raman study of conformational disorder in n-PrNH ₃ X (X → Cl, Br, I). Journal of Molecular Structure, 1985, 127, 241-245. | 3.6 | 8 |
| 136 | Low-temperature raman spectra of bis(ethylammonium)tetrachlorocadmate (EACdC) and two isotopic analogs. Chemical Physics Letters, 1982, 87, 45-49. | 2.6 | 7 |
| 137 | YMn ₂ H _x and RMn ₂ â?yFeyH ₆ (R = Y, Er) studied by Raman, infrared and inelastic neutron scattering spectroscopies. Faraday Discussions, 2011, 151, 307. | 3.2 | 7 |
| 138 | Observation of multiple sites for trivalent europium ions in SrAl ₂ O ₄ . Journal of Luminescence, 2021, 239, 118348. | 3.1 | 7 |
| 139 | Thermal and Electrochemical Interface Compatibility of a Hydroborate Solid Electrolyte with 3 V-Class Cathodes for All-Solid-State Sodium Batteries. ACS Applied Materials & Interfaces, 2021, 13, 55319-55328. | 8.0 | 7 |
| 140 | Luminescence spectroscopy of CaAl ₁₂ O ₁₉ :Eu ³⁺ and SrAl ₁₂ O ₁₉ :Eu ³⁺ nanoparticles. Journal of Luminescence, 2022, 246, 118805. | 3.1 | 7 |
| 141 | Low Temperature Crystal Growth and Structure of Ordered Ba ₇ F ₁₂ Cl ₂ . Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1999, 54, 515-518. | 0.7 | 6 |
| 142 | Magnesiumâ?Adenosine Diphosphate Binding Sites in Wild-type Creatine Kinase and in Mutants:â?Role of Aromatic Residues Probed by Raman and Infrared Spectroscopiesâ?. Biochemistry, 2000, 39, 9251-9256. | 2.5 | 6 |
| 143 | Synthesis and crystal structures of Ba ₆ Mg ₁₁ F ₃₄ and the solid solutions Ba ₆ Mg ₁₁ â?xM(II)xF ₃₄ (M(II) = Tj ETQq1 10.784314 rgBT /Ov | | |
| 144 | Comparative Infrared, Raman, and Natural-Bond-Orbital Analyses of King's Sultam. Helvetica Chimica Acta, 2004, 87, 1748-1766. | 1.6 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | On the crystallochemical origin of the disordered form of Ba ₇ (Eu ¹¹)F ₁₂ Cl ₂ and the structural changes induced at high temperature. <i>Crystal Research and Technology</i> , 2006, 41, 1005-1012. | 1.3 | 6 |
| 146 | Infrared and polarized Raman spectra of dixanthinium tetrachlorozincate single crystal. <i>Journal of Physics and Chemistry of Solids</i> , 2007, 68, 256-263. | 4.0 | 6 |
| 147 | Anisotropic magnetic, transport and thermodynamic properties of novel tetragonal Ce ₂ RhGa ₁₂ compound. <i>Journal of Alloys and Compounds</i> , 2014, 604, 379-383. | 5.5 | 6 |
| 148 | Original oxo-centered bismuth oxo-arsenates; critical effect of PO ₄ ⁴⁻ for AsO ₄ ⁴⁻ substitution. <i>CrystEngComm</i> , 2017, 19, 936-945. | 2.6 | 6 |
| 149 | Correlating Boronâ€“Hydrogen Stretching Frequencies with Boronâ€“Hydrogen Bond Lengths in Closoboranes: An Approach Using DFT Calculations. <i>Helvetica Chimica Acta</i> , 2018, 101, e1700239. | 1.6 | 6 |
| 150 | Energy transfer between different Eu ²⁺ ions in the white phosphor Ba ₇ F ₁₂ Cl ₂ :Eu ²⁺ . <i>Journal of Luminescence</i> , 2021, 233, 117866. | 3.1 | 6 |
| 151 | Conformational studies of 2-butanol using temperature-dependent Raman measurements and MM3 calculations. <i>Journal of Molecular Structure</i> , 1997, 410-411, 357-360. | 3.6 | 5 |
| 152 | Ordering of the heavy anions in mixedBaFBr0.5I0.5crystals: Experimental results. <i>Physical Review B</i> , 2005, 72, . | 3.2 | 5 |
| 153 | Mixed PbFBr _{1-x} I _x cocrystals: structural and spectroscopic investigations. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 036214. | 1.8 | 5 |
| 154 | Vapor pressure measurements of Mg(BH ₄) ₂ using Knudsen torsion effusion thermo graphic method. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 2175-2186. | 7.1 | 5 |
| 155 | Cr-substitution in Ba ₂ In ₂ O ₅ ·(H ₂ O) (x=0.16, 0.74). <i>Solid State Sciences</i> , 2017, 73, 1-6. | 3.2 | 5 |
| 156 | Photocatalytic CO ₂ reduction by Cr-substituted Ba ₂ (In ₂ -Cr)O ₅ ·(H ₂ O) (0.04 ≤ x ≤ 0.60). <i>Solid State Sciences</i> , 2018, 78, 22-29. | 3.2 | 5 |
| 157 | Modified Density Functional Dispersion Correction for Inorganic Layered M _x F _y Compounds (M = Ca, Sr,) Tj ETQq1 1.0784314 ₅ rgBT /Ove | | |
| 158 | Study of the Temperature- and Pressure-Dependent Structural Properties of Alkali Hydrido- <i>clososilicate</i> -borate Compounds. <i>Inorganic Chemistry</i> , 2022, 61, 5224-5233. | 4.0 | 5 |
| 159 | Vibrational characterization of the compound (C ₂ H ₅ NH ₃) ₂ PdCl ₄ (EAPdC). <i>Chemical Physics Letters</i> , 1982, 90, 282-286. | 2.6 | 4 |
| 160 | Raman study of the incommensurate layer crystal (CH ₃ CH ₂ CH ₂ NH ₃) ₂ MnCl ₄ (=PAMnC) from 10 to 300 K. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 5085-5097. | 1.8 | 4 |
| 161 | Crystallochemical Studies in the Family of Crystals Ba _{7-x} NayF ₁₂ Cl _{2-z} Br _z (x < 0.1, y < 0.2, z < 1.5). <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2008, 634, 1041-1044. | 1.2 | 4 |
| 162 | Revisited conformational analysis of perhydro-3a,6a,9a-triazaphenalene based on Raman analysis. <i>Journal of Physical Organic Chemistry</i> , 2009, 22, 282-288. | 1.9 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 163 | Ab initio Structure Determination of Barium Periodate, Ba ₅ I ₂ O ₁₂ , from Powder XRD Data. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014, 640, 3074-3077. | 1.2 | 4 |
| 164 | Estimation of Thermodynamic Properties of Metal Hydroborates. <i>ChemistrySelect</i> , 2019, 4, 8989-8992. | 1.5 | 4 |
| 165 | A simple, low cost furnace for high temperature Raman measurements. <i>Journal of Physics E: Scientific Instruments</i> , 1986, 19, 199-200. | 0.7 | 3 |
| 166 | Calcium-free Solid Solutions in the System Ba ₇ F ₁₂ Cl ₂ ^x Brx (x Å 1.5), a Single-component White Phosphor Host. <i>Journal of Chemical Crystallography</i> , 2007, 37, 469-472. | 1.1 | 3 |
| 167 | Study of surfactant alcohols with various chemical moieties at the hydrophilic-hydrophobic interface. <i>RSC Advances</i> , 2013, 3, 7237. | 3.6 | 3 |
| 168 | New Insights into the Influence of the 4f ⁵ 5d ¹ State in the 4f ⁶ Electronic Configuration of Sm ²⁺ in Crystal Hosts. <i>Journal of Physical Chemistry A</i> , 2019, 123, 2881-2887. | 2.5 | 3 |
| 169 | Synthesis, Characterization, and Crystal Structures of Two New Manganese Aceto EMIM Ionic Compounds with Chains of Mn ²⁺ Ions Coordinated Exclusively by Acetate. <i>ACS Omega</i> , 2020, 5, 15592-15600. | 3.5 | 3 |
| 170 | Probing luminescence of rare earth ions in natural pink fluorites using Raman microscopes. <i>Journal of Raman Spectroscopy</i> , 2022, 53, 1464-1470. | 2.5 | 3 |
| 171 | The conformational equilibrium of CH ₃ CH ₂ CH ₂ NH ₃ ⁺ : Raman study in solution and ab initio calculations. <i>Journal of Molecular Structure</i> , 1989, 196, 69-78. | 3.6 | 2 |
| 172 | Mixed Ba _{5.24} Sr _{0.76} Mg ₇ F ₂₆ . <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 1997, 53, 1735-1738. | 0.4 | 2 |
| 173 | Ba _{2.2} Ca _{0.8} Mg ₄ F ₁₄ , a new solid solution stabilized matrix for an intense blue phosphor. <i>Crystal Research and Technology</i> , 2011, 46, 899-905. | 1.3 | 2 |
| 174 | Structural and dynamic studies of Pr(11BH ₄) ₃ . <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32126-32134. | 7.1 | 2 |
| 175 | Crystal growth and structure determination of the novel tetragonal compound Ce ₂ RhGa ₁₂ . <i>Chemistry of Metals and Alloys</i> , 2011, 4, 229-233. | 0.1 | 2 |
| 176 | Exploring Detailed Reaction Pathways for Hydrogen Storage with Borohydrides Using DFT Calculations. <i>Energy & Fuels</i> , 2022, 36, 5513-5527. | 5.1 | 2 |
| 177 | Crystal-clear - The '2014 Most Superlative Crystal Growth Contest' for School Classes. <i>Chimia</i> , 2014, 68, 893. | 0.6 | 1 |
| 178 | Identification and optical features of the Pb ₄ Ln ₂ O ₇ series (Ln = La, Gd, Sm, Nd); genuine 2D-van der Waals oxides. <i>Chemical Communications</i> , 2019, 55, 2944-2947. | 4.1 | 1 |
| 179 | Fe ₄ (OAc) ₁₀ [EMIM]2: Novel Iron-Based Acetate EMIM Ionic Compound. <i>ACS Omega</i> , 2021, 6, 31907-31918. | 3.5 | 1 |
| 180 | Lithium Boro-hydride LiBH ₄ . Part 2. Raman Spectroscopy.. <i>ChemInform</i> , 2003, 34, no. | 0.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 181 | Structural and Spectroscopic Studies on the Alkali Borohydrides MBH ₄ (M: Na, K, Rb, Cs).. ChemInform, 2004, 35, no. | 0.0 | 0 |
| 182 | Synthesis and Structure of the New Fluoride Bromide Ba _{6.668(2)} Ca _{0.332(2)} F ₁₂ Br ₂ and Solid Solutions with Composition Ba _{7-x} CaxF ₁₂ (ClyBr _{1-y}) ₂ with x = ~0.5, 0 < y < 1.. ChemInform, 2004, 35, no. | 0.0 | 0 |
| 183 | The Chemical Society of Geneva, a Vital Link Between the Academy and the City. Chimia, 2009, 63, 843. | 0.6 | 0 |
| 184 | Physical Chemistry at the University of Geneva. Chimia, 2009, 63, 807. | 0.6 | 0 |
| 185 | Polarized Raman and Hyperpolarizability studies of Hydroxyethylammonium (L) tartrate monohydrate for quadratic nonlinear optics., 2010, ,. | | 0 |
| 186 | Vibrational Studies of the Nonlinear Optical Crystalâ€”2, 4-dinitrophenol., 2010, ,. | | 0 |
| 187 | Â«ElÃ©mentaire !Â» â€“ The 2019 Science Contest for Schools in Geneva to Celebrate the International Year of the Periodic Table. Chimia, 2019, 73, 656-658. | 0.6 | 0 |
| 188 | Room-Temperature Cycling of 4 V Hydroborate-Based All-Solid-State Sodium Battery Stabilized By a Self-Forming Cathode/Solid Electrolyte Interphase. ECS Meeting Abstracts, 2020, MA2020-02, 1022-1022. | 0.0 | 0 |