Svilen Bobev

List of Publications by Citations

Source: https://exaly.com/author-pdf/2768493/svilen-bobev-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 198
 3,328
 32
 45

 papers
 citations
 h-index
 g-index

 231
 3,842
 4.6
 5.82

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
198	Clathrates of Group 14 with Alkali Metals: An Exploration. <i>Journal of Solid State Chemistry</i> , 2000 , 153, 92-105	3.3	207
197	Synthesis and Characterization of Stable Stoichiometric Clathrates of Silicon and Germanium: Cs8Na16Si136 and Cs8Na16Ge136. <i>Journal of the American Chemical Society</i> , 1999 , 121, 3795-3796	16.4	102
196	Cation-anion interactions as structure directing factors: structure and bonding of Ca2CdSb2 and Yb2CdSb2. <i>Journal of the American Chemical Society</i> , 2007 , 129, 4049-57	16.4	84
195	Interplay between size and electronic effects in determining the homogeneity range of the A9Zn4+xPn9 and A9Cd4+xPn9 phases (0 Journal of the American Chemical Society, 2007 , 129, 10011-8	16.4	78
194	Metallic behavior of the Zintl phase EuGe2: combined structural studies, property measurements, and electronic structure calculations. <i>Journal of Solid State Chemistry</i> , 2004 , 177, 3545-3552	3.3	71
193	Probing the limits of the Zintl concept: structure and bonding in rare-earth and alkaline-earth zinc-antimonides Yb9Zn4+xSb9 and Ca9Zn4.5Sb9. <i>Inorganic Chemistry</i> , 2004 , 43, 5044-52	5.1	67
192	Synthesis, crystallographic and theoretical studies of the new Zintl phases Ba2Cd2Pn3 (Pn = As, Sb), and the solid solutions (Ba(1-x)Sr(x))2Cd2Sb3 and Ba2Cd2(Sb(1-x)As(x))3. Dalton Transactions, 2010, 39, 1063-70	4.3	60
191	Unusual Mn-Mn spin coupling in the polar intermetallic compounds CaMn2Sb2 and SrMn2Sb2. <i>Inorganic Chemistry</i> , 2006 , 45, 4047-54	5.1	55
190	Comparison of bulk-sensitive spectroscopic probes of Yb valence in Kondo systems. <i>Physical Review B</i> , 2007 , 75,	3.3	52
189	Isolated infinity1[ZnPn2]4- chains in the Zintl phases Ba2ZnPn2 (Pn = As, Sb, Bi)synthesis, structure, and bonding. <i>Inorganic Chemistry</i> , 2010 , 49, 5173-9	5.1	51
188	Zintl phase variations through cation selection. Synthesis and structure of A21Cd4Pn18 (A = Eu, Sr, Ba; Pn = Sb, Bi). <i>Inorganic Chemistry</i> , 2008 , 47, 1919-21	5.1	50
187	Synthesis, structure and electronic structure of a new polymorph of CaGe2. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 1575-1581	3.3	48
186	Synthesis, structure and physical properties of the new Zintl phases Eu11Zn6Sb12 and Eu11Cd6Sb12. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 2690-2696	3.3	47
185	Ternary rare-earth alumo-silicides ingle-crystal growth from Al flux, structural and physical properties. <i>Journal of Solid State Chemistry</i> , 2005 , 178, 2091-2103	3.3	47
184	Zintl phases with group 15 elements and the transition metals: A brief overview of pnictides with diverse and complex structures. <i>Journal of Solid State Chemistry</i> , 2019 , 270, 346-359	3.3	47
183	Synthesis of 1T, 2H, and 6R Germanane Polytypes. <i>Chemistry of Materials</i> , 2018 , 30, 1335-1343	9.6	43
182	Synthesis, structure, and bonding of the Zintl phase Ba3Cd2Sb4. <i>Inorganic Chemistry</i> , 2008 , 47, 11237-4	45.1	43

(2008-2005)

181	Crystal Growth, Structural, and Property Studies on a Family of Ternary Rare-Earth Phases RE2InGe2 (RE = Sm, Gd, Tb, Dy, Ho, Yb). <i>Chemistry of Materials</i> , 2005 , 17, 5567-5573	9.6	42	
180	Synthesis, structure and properties of the new rare-earth Zintl phase Yb11GaSb9. <i>Journal of Solid State Chemistry</i> , 2005 , 178, 1071-1079	3.3	41	
179	Synthesis, Crystal Structures and Properties of the Zintl Phases Sr2ZnP2, Sr2ZnAs2, A2ZnSb2 and A2ZnBi2 (A = Sr and Eu). <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2011 , 637, 2018-2025	1.3	39	
178	Synthesis, crystal and electronic structures, and properties of the new pnictide semiconductors A2CdPn2 (A = Ca, Sr, Ba, Eu; Pn = P, As). <i>Inorganic Chemistry</i> , 2011 , 50, 8020-7	5.1	37	
177	Single crystal growth, and magnetic and electronic properties of EuGa4. <i>Journal of Magnetism and Magnetic Materials</i> , 2004 , 277, 236-243	2.8	37	
176	Tin clathrates with the type II structure. Journal of the American Chemical Society, 2013, 135, 1696-9	16.4	36	
175	Structure and bonding in Yb4MgGe4: Yb2+/Yb3+ mixed-valency and charge separation. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3532-3	16.4	36	
174	Synthesis and characterization of A3Na10Sn23 (A = Cs, Rb, K) with a new clathrate-like structure and of the chiral clathrate Rb5Na3Sn25. <i>Inorganic Chemistry</i> , 2000 , 39, 5930-7	5.1	36	
173	Synthesis, Structural Characterization, and Physical Properties of the Type-I Clathrates A8Zn18As28 (A = K, Rb, Cs) and Cs8Cd18As28. <i>Chemistry of Materials</i> , 2012 , 24, 3596-3603	9.6	35	
172	New Manganese-Bearing Antimonides and Bismuthides with Complex Structures. Synthesis, Structural Characterization, and Electronic Properties of Yb9Mn4+xPn9 (Pn = Sb or Bi) Chemistry of Materials, 2010 , 22, 840-850	9.6	35	
171	Diverse polyanions based on MnBi4 and MnSb4 tetrahedra: polymorphism, structure, and bonding in Ca21Mn4Bi18 and Ca21Mn4Sb18. <i>Inorganic Chemistry</i> , 2007 , 46, 874-83	5.1	35	
170	Are Ba11Cd6Sb12 and Sr11Cd6Sb12 Zintl phases or not? A density-functional theory study. <i>Journal of Computational Chemistry</i> , 2008 , 29, 2125-33	3.5	35	
169	BaGa2Pn2 (Pn = P, As): new semiconducting phosphides and arsenides with layered structures. <i>Inorganic Chemistry</i> , 2010 , 49, 7935-40	5.1	34	
168	Synthesis, Structure, Thermoelectric Properties, and Band Gaps of Alkali Metal Containing Type I Clathrates: A8Ga8Si38 (A = K, Rb, Cs) and K8Al8Si38. <i>Chemistry of Materials</i> , 2015 , 27, 2812-2820	9.6	33	
167	Syntheses, and crystal and electronic structures of the new Zintl phases Na2ACdSb2 and K2ACdSb2 (A=Ca, Sr, Ba, Eu, Yb): Structural relationship with Yb2CdSb2 and the solid solutions Sr2\(\text{M}\)AxCdSb2, Ba2\(\text{M}\)AxCdSb2 and Eu2\(\text{M}\)YbxCdSb2. Journal of Solid State Chemistry, 2011 , 184, 432-440	3.3	33	
166	Synthesis and structural characterization of the ternary Zintl phases AE3Al2Pn4 and AE3Ga2Pn4 (AE=Ca, Sr, Ba, Eu; Pn=P, As). <i>Journal of Solid State Chemistry</i> , 2012 , 188, 59-65	3.3	32	
165	Eight-coordinated arsenic in the Zintl phases RbCd4As3 and RbZn4As3: synthesis and structural characterization. <i>Inorganic Chemistry</i> , 2011 , 50, 8375-83	5.1	31	
164	Combined Experimental and Density Functional Theory Studies on the Crystal Structures and Magnetic Properties of Mg(Mg1¼Mnx)2Sb2 (x 10.25) and BaMn2Sb2. <i>European Journal of Inorganic Chemistry</i> , 2008 , 2008, 4262-4269	2.3	31	

163	Vacancy ordering in SmGe2-x and GdGe2-x ($x = 0.33$): structure and properties of two Sm3Ge5 polymorphs and of Gd3Ge5. <i>Inorganic Chemistry</i> , 2006 , 45, 7286-94	5.1	31
162	Naked clusters of 56 tin atoms in the solid state. <i>Journal of the American Chemical Society</i> , 2002 , 124, 3359-65	16.4	31
161	Synthesis and characterization of the largest isolated clusters of tin, [Sn12](12-), in (AE)Na10Sn12 (AE = Ca or Sr). <i>Inorganic Chemistry</i> , 2001 , 40, 5361-4	5.1	31
160	Structure and Properties of a New Family of Nearly Equiatomic Rare-Earth Metal-Tin-Germanides RESn1+xGe1☑ (RE = Y, GdⅢm): an Unusual Example of Site Preferences Between Elements from the Same Group. <i>Chemistry of Materials</i> , 2008 , 20, 2151-2159	9.6	30
159	Synthesis, structure, chemical bonding, and magnetism of the series RELiGe2 (RE = La-Nd, Sm, Eu). <i>Inorganic Chemistry</i> , 2012 , 51, 620-8	5.1	27
158	Synthesis, crystal structures, magnetic and electric transport properties of Eu11InSb9 and Yb11InSb9. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 2088-2094	3.3	27
157	Closely related rare-earth metal germanides RE2Li2Ge3 and RE3Li4Ge4 (RE = La-Nd, Sm): synthesis, crystal chemistry, and magnetic properties. <i>Inorganic Chemistry</i> , 2012 , 51, 3119-29	5.1	26
156	Mixed cations and structural complexity in $(Eu(1-x)Ca(x))(4)In(3)Ge(4)$ and $(Eu(1-x)Ca(x))(3)In(2)Ge(3)$ the first two members of the homologous series $A(2[n+m])In(2n+m)Ge(2[n+m])$ (n, m = 1, 2,infinity; A = Ca, Sr, Ba, Eu, or Yb). <i>Inorganic Chemistry</i> ,	5.1	26
155	Ba11Cd8Bi14: bismuth zigzag chains in a ternary alkaline-earth transition-metal Zintl phase. <i>Inorganic Chemistry</i> , 2006 , 45, 7126-32	5.1	26
154	Magnesium substitutions in rare-earth metal germanides with the orthorhombic Gd5Si4-type structure. Synthesis, crystal chemistry, and magnetic properties of RE(5-x)Mg(x)Ge4 (RE = Gd-Tm, Lu, and Y). <i>Inorganic Chemistry</i> , 2009 , 48, 6641-51	5.1	25
153	Simplifying strong electronic correlations in uranium: Localized uranium heavy-fermion UM2Zn20 (M=Co,Rh) compounds. <i>Physical Review B</i> , 2008 , 78,	3.3	22
152	From the Ternary Phase CaZnSb (IID.4) to the Quaternary Solid Solutions CaRE ZnSb (RE = La-Nd, Sm, Gd, x ID.9). A Tale of Electron Doping via Rare-Earth Metal Substitutions and the Concomitant Structural Transformations. <i>Inorganic Chemistry</i> , 2019 , 58, 8506-8516	5.1	21
151	Ba and Sr Binary Phosphides: Synthesis, Crystal Structures, and Bonding Analysis. <i>Inorganic Chemistry</i> , 2015 , 54, 8608-16	5.1	21
150	New quaternary Zintl phases Synthesis , crystal and electronic structures of KA2Cd2Sb3 (A = Ca, Sr, Ba, Eu, Yb). <i>Polyhedron</i> , 2010 , 29, 456-462	2.7	21
149	On the Extended Series of Quaternary Zintl Phases Ca13REMnSb11 (RE = LaNd, Sm, GdDy). European Journal of Inorganic Chemistry, 2016 , 2016, 2912-2922	2.3	21
148	The Ternary Alkaline-Earth Metal Manganese Bismuthides SrMnBi and BaMnBi (x 🛈 .15). <i>Inorganic Chemistry</i> , 2017 , 56, 12369-12378	5.1	20
147	Anodes for Lithium-Ion Batteries Based on Type I Silicon Clathrate BaAlSi - Role of Processing on Surface Properties and Electrochemical Behavior. <i>ACS Applied Materials & District Action State Control of the Control of </i>	46 ⁹ 4 ⁵ 12!	57 ²⁰
146	Five new ternary indium-arsenides discovered. Synthesis and structural characterization of the Zintl phases Sr3In2As4, Ba3In2As4, Eu3In2As4, Sr5In2As6 and Eu5In2As6. <i>Journal of Solid State Chemistry</i> , 2019 , 278, 120889	3.3	20

(2009-2015)

145	Structural variability versus structural flexibility. A case study of Eu9Cd4+xSb9 and Ca9Mn4+xSb9 (x [1)/2). <i>Inorganic Chemistry</i> , 2015 , 54, 947-55	5.1	20	
144	Synthesis, crystal chemistry, and magnetic properties of RE7Li8Ge10 and RE11Li12Ge16 (RE = La-Nd, Sm): new members of the [REGe2](n)[RELi2Ge](m) homologous series. <i>Inorganic Chemistry</i> , 2012 , 51, 6821-9	5.1	20	
143	Crystal chemistry and magnetic properties of the solid solutions CaREMnBi (RE = La-Nd, Sm, and Gd-Ho; \times D.6-0.8). <i>Dalton Transactions</i> , 2017 , 46, 16041-16049	4.3	19	
142	Synthesis, structural characterization, and physical properties of the early rare-earth metal digermanides REGe(2-x) (x 🗓 /4) [RE = La-Nd, Sm]. A case study of commensurately and incommensurately modulated structures. <i>Inorganic Chemistry</i> , 2013 , 52, 953-64	5.1	18	
141	Synthesis, structural characterization and magnetic properties of RE2MgGe2 (RE=rare-earth metal). Journal of Solid State Chemistry, 2011 , 184, 2941-2947	3.3	18	
140	Magnetic order in CaMn2Sb2 studied via powder neutron diffraction. <i>Journal of Magnetism and Magnetic Materials</i> , 2009 , 321, 3653-3657	2.8	18	
139	cis-trans Germanium chains in the intermetallic compounds ALi1\(\mathbb{B}\)InxGe2 and A2(Li1\(\mathbb{B}\)Inx)2Ge3 (A=Sr, Ba, Eu)\(\mathbb{B}\)xperimental and theoretical studies. Journal of Solid State Chemistry, 2010, 183, 2895-290	3 ·3	18	
138	Synthesis, structural characterization, electronic structure, and magnetic properties of the Zintl phase Eu10Cd6Bi12. <i>Chemistry - an Asian Journal</i> , 2007 , 2, 619-24	4.5	18	
137	Gallium substitutions as a means to stabilize alkaline-earth and rare-earth metal pnictides with the cubic Th3P4 type: Synthesis and structure of A7Ga2Sb6 (A=Sr, Ba, Eu). <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1909-1914	3.3	18	
136	Synthesis, crystal structures, and physical properties of the new Zintl phases A21Zn4Pn18 (A=Ca, Eu; Pn=As, Sb)\(\mathbb{V}\) ersatile arrangements of [ZnPn4] tetrahedra. Journal of Solid State Chemistry, 2015, 227, 204-211	3.3	17	
135	Gallium Pnictides of the Alkaline Earth Metals, Synthesized by Means of the Flux Method: Crystal Structures and Properties of CaGa2Pn2, SrGa2As2, Ba2Ga5As5, and Ba4Ga5Pn8 (Pn = P or As). European Journal of Inorganic Chemistry, 2011 , 2011, 4025-4036	2.3	17	
134	Novel ternary alkaline-earth and rare-earth metal antimonides from gallium or indium flux. Synthesis, structural characterization and 121Sb and 151Eu MBsbauer spectroscopy of the series A7Ga8Sb8 (A = Sr, Ba, Eu) and Ba7In8Sb8. <i>Dalton Transactions</i> , 2010 , 39, 6049-55	4.3	17	
133	Nickel deficiency in RENi2⊠P2 (RE=La, Ce, Pr). Combined crystallographic and physical property studies. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 1473-1480	3.3	17	
132	Structure and properties of Gd3Ge4: the orthorhombic RE3Ge4 structures revisited (RE = Y, Tb-Tm). <i>Inorganic Chemistry</i> , 2007 , 46, 8690-7	5.1	17	
131	Cs7In4Bi6: A Zintl Phase Tailored from the PbO-Type Layers of the Parent InBi Compound. <i>Inorganic Chemistry</i> , 1999 , 38, 2672-2675	5.1	17	
130	Rare-Earth Metal Substitutions in Ca9 \blacksquare RExMn4Sb9 (RE = La \blacksquare d, Sm; x \blacksquare). Synthesis and Characterization of a New Series of Narrow-Gap Semiconductors. <i>Chemistry of Materials</i> , 2018 , 30, 3518-	-3 5 27	16	
129	Undeca-europium hexa-zinc dodeca-arsenide. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010 , 66, i24		16	
128	Polymorphism in binary rare-earth metal germanides. Synthesis, structure and properties of the new hexagonal forms of Tb3Ge5 and Dy3Ge5. <i>Journal of Alloys and Compounds</i> , 2009 , 488, 533-537	5.7	16	

127	Synthesis, crystal structure and physical properties of the solid solutions Ca14 \blacksquare RExCdSb11 (RE = La \blacksquare d, Sm, Gd \blacksquare b, x \blacksquare 0.85 \boxminus 0.15). <i>Journal of Applied Physics</i> , 2019 , 125, 245101	2.5	15
126	Synthesis and structure of Sr14Zn1+xAs11 and Eu14Zn1+xAs11 (x 🛈.5). New members of the family of pnictides isotypic with Ca14AlSb11, exhibiting a new type of structural disorder. <i>Journal of Solid State Chemistry</i> , 2019 , 280, 120990	3.3	14
125	Non-stoichiometric compositions arising from synergistic electronic and size effects. Synthesis, crystal chemistry and electronic properties of A14Cd1+xPn11 compounds (0 lk ld.3; A = Sr, Eu; Pn = As, Sb). <i>Journal of Materials Chemistry C</i> , 2015 , 3, 10388-10400	7.1	14
124	Synthesis and crystal chemistry of new ternary pnictides containing lithiumadding structural complexity one step at a time. <i>Dalton Transactions</i> , 2014 , 43, 16889-901	4.3	14
123	New Compounds with [As7]3lClusters: Synthesis and Crystal Structures of the Zintl Phases Cs2NaAs7, Cs4ZnAs14 and Cs4CdAs14. <i>Crystals</i> , 2011 , 1, 87-98	2.3	14
122	Synthesis, crystal and electronic structures of the new quaternary phases A5Cd2Sb5F (A = Sr, Ba, Eu), and Ba5Cd2Sb5O(x) (0.5. <i>Dalton Transactions</i> , 2010 , 39, 11335-43	4.3	14
121	Synthesis and structural characterization of A3In2Ge4 and A5In3Ge6 (A=Ca, Sr, Eu, Yb)New intermetallic compounds with complex structures, exhibiting GeLie and InIh bonding. <i>Journal of Solid State Chemistry</i> , 2010 , 183, 1258-1265	3.3	14
120	The layered antimonides RELi3Sb2 (RE=CeNd, Sm, GdHo). Filled derivatives of the CaAl2Si2 structure type. <i>Journal of Solid State Chemistry</i> , 2014 , 210, 89-95	3.3	13
119	New ternary phosphides and arsenides. Syntheses, crystal structures, physical properties of Eu2ZnP2, Eu2Zn2P3 and Eu2Cd2As3. <i>Journal of Solid State Chemistry</i> , 2013 , 205, 116-121	3.3	13
118	Synthesis, Crystal and Electronic Structures of the Pnictides AE3TrPn3 (AE = Sr, Ba; Tr = Al, Ga; Pn = P, As). <i>Crystals</i> , 2015 , 5, 433-446	2.3	13
117	Ternary K2Zn5As4-type pnictides Rb2Cd5As4 and Rb2Zn5Sb4, and the solid solution Rb2Cd5(As,Sb)4. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2013 , 69, 455-9		13
116	Synthesis, structure and physical properties of the new uranium ternary phase U3Co2Ge7. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 2830-2837	3.3	13
115	New n-Type Zintl Phases for Thermoelectrics: Discovery, Structural Characterization, and Band Engineering of the Compounds A2CdP2 (A = Sr, Ba, Eu). <i>Chemistry of Materials</i> , 2020 , 32, 10697-10707	9.6	12
114	Synthesis, Crystal and Electronic Structure of the Titanium Bismuthides Sr5Ti12Bi19+x, Ba5Ti12Bi19+x, and Sr5EuTi12Bi19+x (x ID.5I.0; II2.4, 4.0). European Journal of Inorganic Chemistry, 2018, 2018, 1266-1274	2.3	12
113	Yet again, new compounds found in systems with known binary phase diagrams. Synthesis, crystal and electronic structure of NdBi and SmBi. <i>Chemical Communications</i> , 2018 , 54, 7089-7092	5.8	12
112	New Type-I and Type-II Clathrates in the Systems CsNaCaBi, RbNaCaBi, and RbNaZnBi. <i>Inorganics</i> , 2014 , 2, 79-95	2.9	12
111	K and Ba distribution in the structures of the clathrate compounds $K(x)Ba(16-x)(Ga,Sn)136$ ($x = 0.8$, 4.4, and 12.9) and $K(x)Ba(8-x)(Ga,Sn)46$ ($x = 0.3$). Acta Crystallographica Section C: Crystal Structure Communications, 2013 , 69, 319-23		12
110	On the existence of Ca2Bi-crystal and electronic structure of Ca4Bi2O. <i>Journal of Alloys and Compounds</i> , 2007 , 427, 67-72	5.7	12

(2020-2020)

109	Observation of an Unexpected n-Type Semiconducting Behavior in the New Ternary Zintl Phase Eu3InAs3. <i>Chemistry of Materials</i> , 2020 , 32, 9616-9626	9.6	12
108	Structural modulations in the rare-earth metal digermanides REAl1-xGe2 (RE = Gd-Tm, Lu, Y; 0.8 Inorganic Chemistry, 2015 , 54, 722-32	5.1	11
107	Niobium-bearing arsenides and germanides from elemental mixtures not involving niobium: a new twist to an old problem in solid-state synthesis. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2018 , 74, 623-627	0.8	11
106	Crystal structures of the four new quaternary copper(I)-selenides A0.5CuZrSe3 and ACuYSe3(A=Sr, Ba). <i>Journal of Solid State Chemistry</i> , 2016 , 242, 14-20	3.3	11
105	The RELixSn2 (RE=LaNd, Sm, and Gd; ON. Journal of Solid State Chemistry, 2014 , 211, 95-105	3.3	11
104	New Lithium-Containing Pnictides with 1-D Infinite Chains of Supertetrahedral Clusters: Synthesis, Crystal and Electronic Structure of Ba4Li2Cd3Pn6 (Pn = P, As and Sb). <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 5113-5124	2.3	11
103	Eleven new compounds in the REIIdlie systems (RE=Pr, Nd, Sm, Gdlib; Y): Crystal chemistry of the RE2CdGe2 series. <i>Journal of Solid State Chemistry</i> , 2012 , 192, 16-22	3.3	11
102	Five Ternary Zintl Phases in the Systems Alkali-Metal I hdium B ismuth. <i>Journal of Solid State Chemistry</i> , 2002 , 163, 436-448	3.3	11
101	Synthesis, characterization and bonding of Ba3Li4Sn8. <i>Journal of Alloys and Compounds</i> , 2002 , 338, 87-9	92 5.7	11
100	Exploratory Work in the Quaternary System of Ca?Eu?Cd?Sb: Synthesis, Crystal, and Electronic Structures of New Zintl Solid Solutions. <i>Materials</i> , 2018 , 11,	3.5	11
99	On the effect of Ga and In substitutions in the CaBi and YbBi bismuthides crystallizing in the tetragonal HoGe structure type. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2018 , 74, 269-27	3 ^{0.8}	11
98	Experimental and Computational Study of the Lithiation of BaAl Ge Based Type I Germanium Clathrates. <i>ACS Applied Materials & Empty Interfaces</i> , 2018 , 10, 37981-37993	9.5	11
97	Undistorted linear Bi chains with hypervalent bonding in LaTiBi from single-crystal X-ray diffraction. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2018 , 74, 618-622	0.8	10
96	Correlations between chemical bonding and magnetic exchange interactions: synthesis, crystal structures, and magnetic properties of the new family RE2AlGe2 (RE = Tb-Tm, Lu). <i>Inorganic Chemistry</i> , 2013 , 52, 5307-15	5.1	10
95	Several New Phases in REMgtie Systems (RE = Rare Earth Metal) is yntheses, Structures, and Chemical Bonding. <i>European Journal of Inorganic Chemistry</i> , 2012 , 2012, 4141-4148	2.3	10
94	Sr11InSb9grown from molten In. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2007 , 63, i178-i178		10
93	Temperature-dependent crystallographic studies and electronic structure of Ba2Cd3Bi4. <i>Journal of Solid State Chemistry</i> , 2006 , 179, 3371-3377	3.3	10
92	Synthesis and structural characterization of the new Zintl phases Ba3Cd2P4 and Ba2Cd2P3. Rare example of small gap semiconducting behavior with negative thermopower within the range 300 KI Journal of Solid State Chemistry, 2020, 289, 121476	3.3	9

91	Synthesis, crystal and electronic structures of the new Zintl phases Ba3Al3Pn5 (Pn = P, As) and Ba3Ga3P5. <i>Inorganic Chemistry</i> , 2013 , 52, 499-505	5.1	9
90	Ternary Compounds in the Sn-Rich Section of the Balas System: Ba8Ga16\Sn30+x (1.1 lk ll 2.8) Clathrates of Type-I and Type-VIII, and BaGa2\Sn4+x (x ld.2) with a Clathrate-like Structure. *Crystals**, 2011 , 1, 145-162	2.3	9
89	Structural chemistry and magnetic properties of RE2[SnxGe1\(\mathbb{B}\)]5 (RE=Nd, Sm) and RE[SnxGe1\(\mathbb{B}\)]2 (RE=Gd, Tb): Four new rare-earth metal intermetallic compounds with germanium zig-zag chains and tin square-nets. <i>Journal of Alloys and Compounds</i> , 2009 , 488, 511-517	5.7	9
88	The new Zintl phases Eu21Cd4Sb18 and Eu21Mn4Sb18. <i>Journal of Solid State Chemistry</i> , 2016 , 238, 303	-33190	8
87	Synthesis and structural characterization of RE7Zn21Tt2 (RE = La-Nd; Tt = Ge, Sn, and Pb): new structure type among the polar intermetallic phases. <i>Inorganic Chemistry</i> , 2013 , 52, 12731-40	5.1	8
86	Synthesis, structural characterization and properties of SrAl4\(\mathbb{R}\)Gex, BaAl4\(\mathbb{R}\)Gex, and EuAl4\(\mathbb{R}\)Gex (x\(\mathbb{D}\).3\(\mathbb{D}\).4\(\mathbb{R}\)Bare examples of electron-rich phases with the BaAl4 structure type. Journal of Solid State Chemistry, 2013, 205, 21-28	3.3	8
85	Abnormal thermal expansion, multiple transitions, magnetocaloric effect, and electronic structure of Gd6Co4.85. <i>Journal of Applied Physics</i> , 2015 , 118, 133903	2.5	8
84	Synthesis and Crystal Structures of the Quaternary Zintl Phases RbNa8Ga3Pn6 (Pn = P, As) and Na10NbGaAs6. <i>Crystals</i> , 2012 , 2, 213-223	2.3	8
83	New polar intermetallic phases RE2Zn5Tt (RE = La-Nd; Tt = Sn and Pb): synthesis, structure, chemical bonding, and magnetic properties. <i>Inorganic Chemistry</i> , 2013 , 52, 9102-10	5.1	8
82	Structural Characterization of the Intermetallic Phase EuZnxIn4-x(x 🗓 .1-1.2). Zn and In Site-Preferences in the BaAl4Structure-Type from Computational Analysis. <i>Bulletin of the Korean Chemical Society</i> , 2013 , 34, 1656-1662	1.2	8
81	Ca14AlBi11 new Zintl phase from earth-abundant elements with a great potential for thermoelectric energy conversion. <i>Materials Today Advances</i> , 2020 , 7, 100094	7.4	8
80	Ultralow Thermal Conductivity and High Thermopower in a New Family of Zintl Antimonides Ca10MSb9 (M = Ga, In, Mn, Zn) with Complex Structures and Heavy Disorder. <i>Chemistry of Materials</i> , 2021 , 33, 3172-3186	9.6	8
79	Layered Quaternary Germanides-Synthesis and Crystal and Electronic Structures of AELiInGe (AE = Sr, Ba, Eu). <i>Inorganic Chemistry</i> , 2019 , 58, 7895-7904	5.1	7
78	New insights into the application of the valence rules in Zintl phases@rystal and electronic structures of Ba7Ga4P9, Ba7Ga4As9, Ba7Al4Sb9, Ba6CaAl4Sb9, and Ba6CaGa4Sb9. <i>Journal of Solid State Chemistry</i> , 2016 , 236, 116-122	3.3	7
77	Quaternary pnictides with complex, noncentrosymmetric structures. Synthesis and structural characterization of the new Zintl phases Na11Ca2Al3Sb8, Na4CaGaSb3, and Na15Ca3In5Sb12. <i>Inorganic Chemistry</i> , 2015 , 54, 1931-9	5.1	7
76	New rare-earth metal germanides with bismuth substitution. Synthesis, structural variations, and magnetism of the RE[BixGe1☑2 (RE=Y, Pr, Nd, Sm, GdⅧm, Lu) compounds. <i>Journal of Solid State Chemistry</i> , 2012 , 196, 586-595	3.3	7
75	Zinc-deficiency in intermetallics with the NaZn13 type. <i>Journal of Alloys and Compounds</i> , 2008 , 463, 119	-52/3	7
74	High-pressure investigation of the heavy-fermion antiferromagnet U3Ni5Al19. <i>Physical Review B</i> , 2005 , 71,	3.3	7

73	Synthesis, and Crystal and Electronic Structures, of the Titanium-Rich Bismuthides AETiBi (AE = Sr, Ba, Eu). <i>Inorganic Chemistry</i> , 2019 , 58, 2934-2941	5.1	7
72	Synthesis and Structural Characterization of Ba7Li11Bi10 and AE4(Li,Tr)7Pn6 (AE = Sr, Ba, Eu; Tr = Ga, In; Pn = Sb, Bi). <i>Inorganics</i> , 2018 , 6, 109	2.9	7
71	Synthesis and structural characterization of the Zintl phases Na3Ca3TrPn4, Na3Sr3TrPn4, and Na3Eu3TrPn4 (Tr=Al, Ga, In; Pn=P, As, Sb). <i>Journal of Solid State Chemistry</i> , 2017 , 249, 160-168	3.3	6
70	Multifaceted Sn-Sn bonding in the solid state. Synthesis and structural characterization of four new Ca-Li-Sn compounds. <i>Dalton Transactions</i> , 2019 , 48, 14398-14407	4.3	6
69	An Unusual Triple-Decker Variant of the Tetragonal BaAl-Structure Type: Synthesis, Structural Characterization, and Chemical Bonding of SrCdGe and EuCdGe. <i>Inorganic Chemistry</i> , 2018 , 57, 833-842	5.1	6
68	On the nature of Ge-Pb bonding in the solid state. Synthesis, structural characterization, and electronic structures of two unprecedented germanide-plumbides. <i>Journal of the American Chemical Society</i> , 2012 , 134, 12708-16	16.4	6
67	Copper and Zinc Substitutions in Clathrates of Tin: Synthesis, Structural Characterization, and Physical Properties of A8Cu2.67Sn43.33 and A8Zn4Sn42 (A = K, Rb, Cs) with the Type-I Structure. <i>Chemistry of Materials</i> , 2013 , 25, 3737-3744	9.6	6
66	Magnetic order and heavy fermion behavior in CePd1+xAl6½: Synthesis, structure, and physical properties. <i>Journal of Solid State Chemistry</i> , 2010 , 183, 707-711	3.3	6
65	Antiferromagnetic order and evolution of magnetic entropy in RE4Zn5Ge6 (RE=Y, GdIu). <i>Journal of Magnetism and Magnetic Materials</i> , 2006 , 299, 87-93	2.8	6
64	Magnetic mixed valent semimetal EuZnSb2 with Dirac states in the band structure. <i>Physical Review Research</i> , 2020 , 2,	3.9	6
63	Bismuth as a Reactive Solvent in the Synthesis of Multicomponent Transition-Metal-Bearing Bismuthides. <i>Inorganic Chemistry</i> , 2020 , 59, 3459-3470	5.1	6
62	The series RE5Li2Sn7 (RE = Ce, Pr, Nd, Sm) revisited: crystal structure of RE5Li2-xSn7+x [0 lk ll 0.03 (1)]. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2014 , 70, 2-6	0.8	5
61	Dimorphism in La5Ge3 and Ce5Ge3? How Exploratory Syntheses Led to Surprising New Finds in the Late and Cette Binary Phase Diagrams. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014 , 640, 805-813	1.3	5
60	Indium Doping in BaSn3⊠ Inx (0 lk l்0.2) with Ni3Sn Structure. <i>Crystals</i> , 2011 , 1, 104-111	2.3	5
59	One Structure, Two Elements-LuGe Superconductor vs Ordinary Metallic Conductor LuSn. A Case Study on How Site-Selective Germanium for Tin Atom Substitution Leads to Modulating of the Charge Distribution. <i>Inorganic Chemistry</i> , 2020 , 59, 16853-16864	5.1	5
58	Complex Structural Disorder in the Zintl Phases YbMnSb and YbMnSb. <i>Inorganic Chemistry</i> , 2021 , 60, 6702-6711	5.1	5
57	Structural analysis of GdFeBi from single-crystal X-ray diffraction methods and electronic structure calculations. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2019 , 75, 562-567	0.8	5
56	Synthesis, crystal structures and chemical bonding of RE(5-x)Li(x)Ge4 (RE = Nd, Sm and Gd; x ? 1) with the orthorhombic Gd5Si4 type. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2013 , 69, 1-4		4

55	Rare-earth metal gallium silicides via the gallium self-flux method. Synthesis, crystal structures, and magnetic properties of RE(Ga1\(\text{MS}\) ix)2 (RE=Y, La\(\text{Md}\), Sm, Gd\(\text{Mb}\), Lu). Journal of Solid State Chemistry, 2013 , 201, 191-203	3.3	4
54	On the possibility for Rb- and Eu-cation ordering in type-I clathrates: synthesis and homogeneity range of the novel compounds Rb(8-x)Eu(x)(In,Ge)46 (0.6 lk 🛮 .8). <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2013 , 69, 1457-61		4
53	Gallium E in mixing in BaGa4\(\mathbb{R}\)Snx[x= 0.89 (2)] with the BaAl4structure type. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2007 , 63, i35-i37		4
52	Synthesis, structural characterization, and electronic structure of the novel Zintl phase BaZnP. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2020 , 76, 869-873	0.8	4
51	Understanding the Amorphous Lithiation Pathway of the Type I Ba8Ge43 Clathrate with Synchrotron X-ray Characterization. <i>Chemistry of Materials</i> , 2020 , 32, 9444-9457	9.6	4
50	Structural Origin of Reversible Li Insertion in Guest-Free, Type-II Silicon Clathrates. <i>Advanced Energy and Sustainability Research</i> , 2021 , 2, 2000114	1.6	4
49	Synthesis and Structural Characterization of the New Clathrates Kttdte, Rbttdte, and Csttdte. <i>Materials</i> , 2016 , 9,	3.5	4
48	The Zintl phases InAs (A = Ca, Sr, Ba): new topological insulators and thermoelectric material candidates. <i>Dalton Transactions</i> , 2021 , 50, 9173-9184	4.3	4
47	Synthesis and structural characterization of RE6Cd23T (RE=Lald; T=Sn, Sb, Pb, and Bi). <i>Journal of Solid State Chemistry</i> , 2017 , 246, 203-208	3.3	3
46	Synthesis and structure determination of seven ternary bismuthides: crystal chemistry of the RELi3Bi2 family (RE = La-Nd, Sm, Gd, and Tb). <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2015 , 71, 894-9	0.8	3
45	Synthesis and Structural Characterization of Ca14NbxIn1-xAs11 (x 🛈 .85). <i>Solid State Phenomena</i> , 2016 , 257, 147-151	0.4	3
44	Tunable Magnetic Exchange between Rare-Earth Metal 5d and Iron 3d States: A Case Study of the Multiple Magnetic Transitions in Gd6FeBi2 and the Solid Solutions Dy6配GdxFeBi2 (1 ៤ ៤) with Curie Temperatures in the Range 120日50 K. <i>Chemistry of Materials</i> , 2020 , 32, 3087-3096	9.6	3
43	On the structures of the rare-earth metal germanides from the series REAlGe (RE = Nd, Sm, Gd, Tb, Dy, Ho; 0.6 Dalton Transactions, 2017 , 46, 9253-9265	4.3	3
42	Experimental and theoretical investigations of the novel ternary compound Ca4InGe4. <i>Dalton Transactions</i> , 2012 , 41, 12446-51	4.3	3
41	Ba5Cd2Sb4O2A New Antimonide Oxide with a Complex Structure. <i>Crystals</i> , 2011 , 1, 206-214	2.3	3
40	Diytterbium(II) lithium indium(III) digermanide, Yb(2)LiInGe(2). <i>Acta Crystallographica Section E:</i> Structure Reports Online, 2010 , 66, i43		3
39	Dibarium tricadmium bis-muthide(-I,-III) oxide, Ba(2)Cd(3-Bi(3)O. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010 , 66, i81		3
38	Structural diversity of the Zintl pnictides with rare-earth metals. <i>Fundamental Theories of Physics</i> , 2021 , 227-324	0.8	3

37	Caught in Action. The Late Rare Earths Thulium and Lutetium Substituting Aluminum Atoms in the Structure of CaAlBi. <i>Journal of the American Chemical Society</i> , 2021 , 143, 65-68	16.4	3
36	Solid-State Electrochemical Synthesis of Silicon Clathrates Using a Sodium-Sulfur Battery Inspired Approach. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 020516	3.9	3
35	Crystal structure of the layered arsenide RbCuAs. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2018 , 74, 1715-1718	0.8	3
34	Two Polymorphs of BaZnP: Crystal Structures, Phase Transition, and Transport Properties. <i>Inorganic Chemistry</i> , 2021 , 60, 14426-14435	5.1	3
33	Intricate Li-Sn Disorder in Rare-Earth Metal-Lithium Stannides. Crystal Chemistry of RELiSn (RE = La-Nd, Sm; x Inorganic Chemistry, 2018 , 57, 5632-5641	5.1	2
32	Cu and Zn Substituted Silicon Clathrates with the Cubic Type-II Structure: Synthesis and Characterization of Cs8Na16Cu3.8Si132.2 and Cs8Na16Zn6.9Si129.1. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017 , 643, 1874-1880	1.3	2
31	Synthesis and Structural Characterization of ACu9Tt4 (A = Ca, Sr, Ba, Eu; Tt = Si, Ge, Sn) ☐ Tetragonally Distorted Ternary Variants of the Cubic NaZn13 Structure Type. Improved Structure Refinement of SrCu2Ge2. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012 , 638, 1204-1211	1.3	2
30	Penta-europium dicadmium penta-anti-monide oxide, Eu(5)Cd(2)Sb(5)O. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2011 , 67, i11		2
29	Synthesis and structural characterization of novel clathrate-II compounds of silicon 2006,		2
28	Synthesis and Characterization of Large Single Crystals of Silicon and Germanium Clathrate-II Compounds and a New Tin Compound with Clathrate Layers. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 1351		2
27	Data from the electronic band structures of several Zintl phases with group 15 elements and the transition metals. <i>Data in Brief</i> , 2019 , 22, 446-450	1.2	2
26	Synthesis and structure determination of CeCdTe: a new chalcogen-containing member of the RECdT family (RE is a rare-earth metal and T is a late group 14, 15 and 16 element). <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2017 , 73, 121-125	0.8	1
25	Cu3Ru6Sb8Ħ new ternary antimonide with a new structure type. <i>Inorganic Chemistry Frontiers</i> , 2016 , 3, 1616-1623	6.8	1
24	Calcium substitution in rare-earth metal germanides with the hexagonal Mn5Si3 structure type. structural characterization of the extended series RE5\(\mathbb{R}\)CaxGe3 (RE=Rare-earth metal). <i>Journal of Solid State Chemistry</i> , 2014 , 217, 142-149	3.3	1
23	Synthesis and crystal structures of RE7Zn(21+x)Si(2-x) [RE = Ce, Pr, and Nd; 0.09 (1) Acta Crystallographica Section C, Structural Chemistry, 2014 , 70, 945-8	0.8	1
22	A density-functional study of the balance of magnetic exchange interactions in CaMn2Sb2 and SrMn2Sb2. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2006 , 632, 2108-2108	1.3	1
21	Ta1.40(1)Mn4.60(1)Si5: distribution of the Ta and Mn atoms. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2006 , 62, i69-i71		1
20	Magnetic frustration in a metallic fcc lattice. <i>Physical Review Research</i> , 2020 , 2,	3.9	1

19	Synthesis and Transport Properties of the Family of Zintl Phases Ca3RESb3 (RE = LaNd, Sm, Gdmm, Lu): Exploring the Roles of Crystallographic Disorder and Core 4f Electrons for Enhancing Thermoelectric Performance. <i>Chemistry of Materials</i> ,	9.6	1
18	Single crystal growth and characterization of new Zintl phase Ca9Zn3.1In0.9Sb9. <i>Journal of Solid State Chemistry</i> , 2021 , 296, 121947	3.3	1
17	Synthesis and structural characterization of the type-I clathrates KAlSn and RbAlSn (x ? 6.4-9.7). <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2019 , 75, 1535-1540	0.8	1
16	Structural and Electrochemical Properties of Type VIII BaGaSn Clathrate (団) during Lithiation. <i>ACS Applied Materials & Samp; Interfaces</i> , 2021 , 13, 42564-42578	9.5	1
15	Transport properties and thermal behavior of YbMnSb2 semimetal above room temperature. Journal of Solid State Chemistry, 2021 , 303, 122467	3.3	1
14	Polaronic Conductivity in Cr 2 Ge 2 Te 6 Single Crystals. <i>Advanced Functional Materials</i> ,2105111	15.6	1
13	The Highly Disordered Zintl Phase Ca10GdCdSb9 INew Example of a p-type Semiconductor with Remarkable Thermoelectric Properties. <i>Materials Today Physics</i> , 2022 , 100725	8	1
12	On the New Oxyarsenides Eu5Zn2As5O and Eu5Cd2As5O. <i>Crystals</i> , 2020 , 10, 475	2.3	O
11	Exploration of Multi-Component Vanadium and Titanium Pnictides Using Flux Growth and Conventional High-Temperature Methods. <i>Frontiers in Chemistry</i> , 2019 , 7, 909	5	0
10	Structural Uniqueness of the [Nb(As)] Cluster in the Zintl Phase CsNbAs. <i>Journal of Physical Chemistry A</i> , 2021 , 125, 4323-4333	2.8	O
9	Synthesis and structural characterization of orthorhombic Cu3Bb (IID.1) and hexagonal Cu3Sb1IInx (x ID.2) phases. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2021 , 236, 61-70	1	0
8	Electrochemical Lithium Alloying Behavior of Guest-Free Type II Silicon Clathrates. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 19110-19118	3.8	O
7	Synthesis, Structural Characterization and Chemical Bonding of Sr7Li6Sn12 and its Quaternary Derivatives with Eu and Alkaline Earth Metal (Mg, Ca, Ba) Substitutions. A Tale of Seven Li-Containing Stannides and Two Complex Crystal Structures. <i>European Journal of Inorganic</i>	2.3	
6	Chemistry, 2020 , 2020, 1979-1988 Studied and Forgotten. A Fresh Look at the LiMn©e System. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2020 , 646, 1195-1204	1.3	
5	Complex Disorder in Type-I Clathrates: Synthesis and Structural Characterization of A8GaxSn46⊠ (A = Rb, Cs; 6.9 Crystals, 2020 , 10, 298	2.3	
4	Electronic stabilization by occupational disorder in the ternary bismuthide LiInBi (x \mathbb{P} 0.14, y \mathbb{P} 0.29). Acta Crystallographica Section C, Structural Chemistry, 2020 , 76, 585-590	0.8	
3	Chemical Bonding and Structural Relationships in Extended Solids 2021 , 19-47		
2	Crystal Chemistry of RE6MgxCd23NPb [0.6(1) Ix IB.2(1); RE = La and Ce]. New Mixed-Metal Derivatives of the RE6Cd23T Phases (T = Group 14/15/16 Element). <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2018 , 644, 1734-1740	1.3	

The structure of CeAlGe refined for the first time from single-crystal X-ray diffraction data. *Acta Crystallographica Section C, Structural Chemistry*, **2021**, 77, 81-83

0.8