Oleg Parasyuk

List of Publications by Citations

219 papers	3,316 citations	27 h-index	42 g-index
280 ext. papers	3,700 ext. citations	3.8 avg, IF	5.06 L-index

#	Paper	IF	Citations
219	Photoelectrical properties and the electronic structure of Tl(1-x)In(1-x)Sn(x)Se2 (x = 0, 0.1, 0.2, 0.25) single crystalline alloys. *Physical Chemistry Chemical Physics*, **2013**, 15, 6965-72	3.6	156
218	Single crystal preparation and crystal structure of the Cu2Zn/Cd,Hg/SnSe4 compounds. *Journal of Alloys and Compounds*, **2002**, 340, 141-145	5.7	151
217	Linear, non-linear optical susceptibilities and the hyperpolarizability of the mixed crystals Ag(0.5)Pb(1.75)Ge(S(1-x)Se(x))4: experiment and theory. *Physical Chemistry Chemical Physics*, **2013**, 15, 18979-86	3.6	144
216	Phase relations in the quasi-binary Cu2GeS3–ZnS and quasi-ternary Cu2S–Zn(Cd)S–GeS2 systems and crystal structure of Cu2ZnGeS4. *Journal of Alloys and Compounds*, **2005**, 397, 85-94	5.7	88
215	Phase diagram of the Cu2GeSe3–ZnSe system and crystal structure of the Cu2ZnGeSe4 compound. *Journal of Alloys and Compounds*, **2001**, 329, 202-207	5.7	59
214	Electronic structure of Cu2ZnGeSe4 single crystal: Ab initio FP-LAPW calculations and X-ray spectroscopy measurements. *Physica B: Condensed Matter*, **2015**, 461, 75-84	2.8	46
213	Electronic spectral parameters and IR nonlinear optical features of novel Ag0.5Pb1.75GeS4 crystal. *Journal of Crystal Growth*, **2012**, 354, 142-146	1.6	46
212	The Ag2S–In2S3–Si(Ge)S2 systems and crystal structure of quaternary sulfides Ag2In2Si(Ge)S6. *Journal of Alloys and Compounds*, **2008**, 452, 348-358	5.7	45
211	Crystal growth, electron structure and photo induced optical changes in novel AgxGaxGe1–xSe2 (x=0.333, 0.250, 0.200, 0.167) crystals. *Optical Materials*, **2012**, 35, 65-73	3.3	44
210	Electronic structure and optical properties of Ag2HgSnSe4: First-principles DFT calculations and X-ray spectroscopy studies. *Journal of Alloys and Compounds*, **2018**, 732, 372-384	5.7	40
209	Electronic structure of non-centrosymmetric AgCd2GaS4 and AgCd2GaSe4 single crystals. *Journal of Electron Spectroscopy and Related Phenomena*, **2012**, 185, 559-566	1.7	40
208	Electronic Structure of Quaternary Chalcogenide Ag2In2Ge(Si)S6 Single Crystals and the Influence of Replacing Ge by Si: Experimental X-Ray Photoelectron Spectroscopy and X-Ray Diffraction Studies and Theoretical Calculations. *Science of Advanced Materials*, **2013**, 5, 316-327	2.3	40
207	Electronic structure of cadmium selenogallate CdGa2Se4 as studied using ab initio calculations and X-ray photoelectron spectroscopy. *Journal of Alloys and Compounds*, **2009**, 481, 28-34	5.7	38
206	Phase relations in the Ag2S–CdS–SnS2 system and the crystal structure of the compounds. *Journal of Alloys and Compounds*, **2005**, 399, 173-177	5.7	37
205	Crystal growth and the electronic structure of Tl3PbCl5. *Journal of Physics and Chemistry of Solids*, **2011**, 72, 705-713	3.9	36
204	Influence of replacing Si by Ge in the chalcogenide quaternary sulfides Ag2In2Si(Ge)S6 on the chemical bonding, linear and nonlinear optical susceptibilities, and hyperpolarizability. *Journal of Physical Chemistry B*, **2013**, 117, 2545-53	3.4	35
203	Ag2HgSnS4 single crystals as promising materials for optoelectronic. *Optical Materials*, **2011**, 33, 1302-1306	3.3	35

202	Crystal structures of low- and high-temperature modifications of Cu2CdGeSe4. *Journal of Alloys and Compounds*, **2002**, 347, 193-197	5.7	35
201	Optical spectra and band structure of Ag(x)Ga(x)Ge(1-x)Se2 (x = 0.333, 0.250, 0.200, 0.167) single crystals: experiment and theory. *Journal of Physical Chemistry B*, **2013**, 117, 15220-31	3.4	33
200	Single crystal growth and the electronic structure of orthorhombic Tl3PbBr5: A novel material for non-linear optics. *Optical Materials*, **2013**, 35, 1081-1089	3.3	32
199	Single crystal growth and electronic structure of TlPbI3. *Materials Chemistry and Physics*, **2016**, 172, 165-172	4.4	31
198	Second anion coordination for wurtzite and sphalerite chalcogenide derivatives as a tool for the description of anion sub-lattice. *Materials Chemistry and Physics*, **2013**, 139, 92-99	4.4	31
197	Crystal structure of the new quaternary phase AgCd2GaS4 and phase diagram of the quasi-binary system AgGaS2–CdS. *Journal of Alloys and Compounds*, **2000**, 312, 189-195	5.7	31
196	Synthesis and structural properties of CuInGeS4. *Journal of Crystal Growth*, **2011**, 324, 212-216	1.6	30
195	Single crystal preparation and properties of the AgGaGeS4–AgGaGe3Se8 solid solution. *Journal of Crystal Growth*, **2011**, 318, 708-712	1.6	29
194	Electronic structure, optical properties, and lattice dynamics of orthorhombic Cu2CdGeS4 and Cu2CdSiS4 semiconductors. *Physical Review B*, **2014**, 90,	3.3	28
193	IR operated novel Ag0.98Cu0.02GaGe3Se8 single crystals. *Journal of Physics and Chemistry of Solids*, **2011**, 72, 1354-1357	3.9	28
192	The phase equilibria in the quasi-binary Cu2GeS3/Se3/–CdS/Se/ systems. *Journal of Alloys and Compounds*, **2000**, 299, 227-231	5.7	27
191	The Ag2S–ZnS–GeS2 system: Phase diagram, glass-formation region and crystal structure of Ag2ZnGeS4. *Journal of Alloys and Compounds*, **2010**, 500, 26-29	5.7	26
190	Phase diagram of the CuInS2–ZnS system and some physical properties of solid solutions phases. *Journal of Alloys and Compounds*, **2003**, 348, 57-64	5.7	26
189	Crystal structure of the phases Hg5CIII2X8 (CIII = Ga, In; X = Se, Te). *Journal of Alloys and Compounds* , **2010**, 503, 40-43	5.7	25
188	The phase equilibria in the quasi-ternary Cu2S–CdS–SnS2 system. *Journal of Alloys and Compounds*, **1998**, 279, 142-152	5.7	24
187	Crystal structure of the Cu2CdSn3S8 compound. *Journal of Alloys and Compounds*, **2000**, 307, 124-126	5.7	24
186	Particular features of the electronic structure and optical properties of Ag2PbGeS4 as evidenced from first-principles DFT calculations and XPS studies. *Materials Chemistry and Physics*, **2018**, 208, 268-280	4.4	23
185	A theoretical and experimental study of the valence-band electronic structure and optical constants of quaternary copper mercury tin sulfide, Cu2HgSnS4, a potential material for optoelectronics and solar cells. *Optical Materials*, **2019**, 96, 109296	3.3	23

184	X-ray spectroscopy study of the electronic structure of non-centrosymmetric Ag2CdSnS4 single crystal. *Optical Materials*, **2014**, 36, 1396-1401	3.3	23
183	Electronic structure and optical properties of Cs2HgI4: Experimental study and band-structure DFT calculations. *Optical Materials*, **2015**, 42, 351-360	3.3	23
182	First-principles band-structure calculations and X-ray photoelectron spectroscopy studies of the electronic structure of TlPb2Cl5. *Journal of Alloys and Compounds*, **2014**, 582, 802-809	5.7	23
181	The Ag2S–HgS–GeS2 system at 670 K and the crystal structure of the Ag2HgGeS4 compound. *Journal of Alloys and Compounds*, **2002**, 336, 213-217	5.7	23
180	Electronic structure and optical properties of Cu2CdGeS4: DFT calculations and X-ray spectroscopy measurements. *Optical Materials*, **2015**, 47, 435-444	3.3	22
179	Electronic structure of non-centrosymmetric Ag2HgSnS4 single crystal. *Optical Materials*, **2014**, 36, 977-981	3.3	22
178	Single crystal growth and the electronic structure of TlPb2Br5. *Optical Materials*, **2013**, 36, 251-258	3.3	22
177	Formation of intermediate solid solutions in the quaternary exchange system Cu(In,Ga)(S,Se)2–Cd(S,Se). *CrystEngComm*, **2013**, 15, 4838	3.3	22
176	Electrical and Optical Properties of Cu2CdGeS4 Single Crystals. *Inorganic Materials*, **2003**, 39, 919-923	0.9	22
175	Electronic structure of Cu2CdGeSe4 single crystal as determined from X-ray spectroscopy data. *Materials Chemistry and Physics*, **2015**, 160, 345-351	4.4	21
174	PbGa2GeS6 crystal as a novel nonlinear optical material: Band structure aspects. *Journal of Alloys and Compounds*, **2018**, 740, 294-304	5.7	20
173	X-ray photoelectron spectrum, X-ray diffraction data, and electronic structure of chalcogenide quaternary sulfide Ag2In2GeS6: experiment and theory. *Journal of Materials Science*, **2013**, 48, 1342-1350	4.3	20
172	Electronic structure of the high-temperature tetragonal Tl3PbBr5 phase. *Journal of Alloys and Compounds*, **2013**, 576, 271-278	5.7	20
171	Tl1–xIn1–xSnxSe2 (x = 0, 0.1, 0.2, 0.25) single-crystalline alloys as promising non-linear optical materials. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 3555-3563	2.1	20
170	Phase diagram of the quasi-binary Cu2GeS3–HgS system and crystal structure of the LT-modification of the Cu2HgGeS4 compound. *Journal of Alloys and Compounds*, **2002**, 334, 143-146	5.7	20
169	Phase diagram of the AgGaSe2–CdSe system and crystal structure of the AgCd2GaSe4 compound. *Journal of Alloys and Compounds*, **2002**, 343, 125-131	5.7	20
168	Piezooptical coefficients of La3Ga5SiO14 and CaWO4 crystals: A combined optical interferometry and polarization-optical study. *Optical Materials*, **2010**, 33, 26-30	3.3	19
167	The phase equilibria in the quasi-ternary Ag2Se?Ga2Se3?GeSe2 system. *Journal of Alloys and Compounds*, **1997**, 260, 111-120	5.7	19

166	Crystal structure of Ag8SnSe6. *Journal of Alloys and Compounds*, **2002**, 339, 113-117	5.7	19
165	Single crystal growth and physical properties of the Cu2CdGeS4 compound. *Journal of Alloys and Compounds*, **2002**, 339, 40-45	5.7	19
164	Specific features of the electronic structure of a novel ternary Tl3PbI5 optoelectronic material. *Physical Chemistry Chemical Physics*, **2014**, 16, 12838-47	3.6	18
163	ELECTRONIC STRUCTURE OF AgCd2GaS4. *Surface Review and Letters*, **2007**, 14, 403-409	1.1	18
162	The quasi-ternary system Ag2SCdSGeS2 and the crystal structure of Ag2CdGeS4. *Journal of Alloys and Compounds*, **2005**, 397, 95-98	5.7	18
161	X-ray powder diffraction refinement of Cu2ZnGeTe4 structure and phase diagram of the Cu2GeTe3–ZnTe system. *Journal of Alloys and Compounds*, **2005**, 397, 169-172	5.7	18
160	Electronic structure and photoelectrical properties of Ag2In2SiSe6 and Ag2In2GeSe6. *Optical Materials*, **2014**, 38, 10-16	3.3	17
159	Specific features of band structure and optical anisotropy of Cu2CdGeSe4 quaternary compounds. *Materials Chemistry and Physics*, **2014**, 147, 155-161	4.4	17
158	X-ray diffraction study of the AgCd2–MnxGaS4 semiconductor alloys and their electrical, optical, and photoelectrical properties. *Physica B: Condensed Matter*, **2006**, 373, 355-359	2.8	17
157	Phase equilibria in the quasi-ternary Cu2Se–ZnSe–GeSe2 system. *Journal of Alloys and Compounds*, **2003**, 348, 195-202	5.7	17
156	Phase equilibria in the quasi-ternary system Ag2S–CdS–Ga2S3. *Journal of Alloys and Compounds*, **2001**, 325, 167-179	5.7	17
155	Crystal structure and vibrational properties of Cu2ZnSiSe4 quaternary semiconductor. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 1808-1815	1.3	17
154	Photovoltaic, photoelectric and optical spectra of novel AgxGaxGe1–xSe2 (0.167 ≤ x ≤ 0.333) quaternary single crystals. *Materials Chemistry and Physics*, **2012**, 135, 837-841	4.4	16
153	Phase diagrams of the quasi-binary systems Cu2S–SiS2 and Cu2SiS3–PbS and the crystal structure of the new quaternary compound Cu2PbSiS4. *Journal of Alloys and Compounds*, **2005**, 399, 149-154	5.7	16
152	X-ray powder diffraction study of the Cu2Cd1–MnxSnSe4 alloys. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 459-465	1.6	16
151	Single-crystal growth and properties of AgCd2GaS4. *Journal of Crystal Growth*, **2005**, 279, 140-145	1.6	16
150	The Ag2Se–CdSe–SnSe2 system at 670 K and the crystal structure of the Ag2CdSnSe4 compound. *Journal of Alloys and Compounds*, **2002**, 335, 176-180	5.7	16
149	Crystal structures of the Ag4HgGe2S7 and Ag4CdGe2S7 compounds. *Journal of Alloys and Compounds*, **2002**, 340, 157-166	5.7	16

148	Phase diagram and electric transport properties of samples of the quasi-binary system CuInS2–CdS. *Journal of Alloys and Compounds*, **2000**, 309, 39-44	5.7	16
147	Manifestation of Anomalous Weak Space-Charge-Density Acentricity for a TlHgBr Single Crystal. *Inorganic Chemistry*, **2016**, 55, 10547-10557	5.1	16
146	Photoconductivity and nonlinear optical features of novel Ag x Ga x Ge 1-x Se 2 crystals. *Materials Research Bulletin*, **2017**, 85, 74-79	5.1	15
145	Phase diagram of the quasi-binary system TlInSe2–SnSe2. *Journal of Alloys and Compounds*, **2011**, 509, 2693-2696	5.7	15
144	Single crystal growth and properties of β-phase in the CuInSe2+2CdS<=>CuInS2+2CdSe reciprocal system. *Solar Energy Materials and Solar Cells*, **2008**, 92, 1495-1499	6.4	15
143	Sellmeier equations for green, yellow, and orange colored HgGa2S4 crystals. *Applied Physics Letters*, **2007**, 90, 181913	3.4	15
142	The Ag2Se–HgSe–SnSe2 system and the crystal structure of the Ag2HgSnSe4 compound. *Journal of Alloys and Compounds*, **2002**, 339, 140-143	5.7	15
141	Synthesis, structural, X-ray photoelectron spectroscopy (XPS) studies and IR induced anisotropy of Tl4HgI6 single crystals. *Materials Chemistry and Physics*, **2017**, 187, 156-163	4.4	14
140	Growth, structure and optical properties of Tl4HgBr6 single crystals. *Physica B: Condensed Matter*, **2015**, 479, 134-142	2.8	14
139	Huge operation by energy gap of novel narrow band gap Tl1−xIn1−xBxSe2(B = Si, Ge): DFT, x-ray emission and photoconductivity studies. *Materials Research Express*, **2016**, 3, 025902	1.7	14
138	Two-photon absorption of Tl1−xIn1−xSnxSe2 (x = 0, 0.1, 0.2, 0.25) single crystalline alloys and their nanocrystallites. *Optical Materials*, **2013**, 35, 2514-2518	3.3	14
137	Photoinduced features of energy bandgap in quaternary Cu2CdGeS4 crystals. *Journal of Physics Condensed Matter*, **2013**, 25, 505802	1.8	14
136	Single crystal growth and properties of the β-phase in the CuInSe2–CdTe system. *Journal of Crystal Growth*, **2009**, 311, 2381-2384	1.6	14
135	Formation of an endothermal Cu2In2SiS6 compound in the CuInS2–SiS2 system. *Journal of Alloys and Compounds*, **2007**, 443, 61-67	5.7	14
134	Phase diagram of the Ag2S–HgS–SnS2 system and single crystal preparation, crystal structure and properties of Ag2HgSnS4. *Journal of Alloys and Compounds*, **2005**, 399, 32-37	5.7	14
133	X-ray powder diffraction study of semiconducting alloys Ag1−xCuxCd2GaS4 and AgCd2Ga1−xInxS4. *Journal of Alloys and Compounds*, **2005**, 402, 186-193	5.7	14
132	X-ray powder diffraction refinement of Ag2In2SiSe6 structure and phase diagram of the AgInSe2–SiSe2 system. *Journal of Alloys and Compounds*, **2006**, 414, 73-77	5.7	14
131	Structural and optical properties of noncentrosymmetric quaternary crystal AgCd2GaS4. *Journal of Crystal Growth*, **2006**, 292, 494-499	1.6	14

130	The Ag2Se–HgSe–SiSe2 system in the 0–50 mol.% SiSe2 region. *Journal of Alloys and Compounds*, **2003**, 348, 157-166	5.7	14
129	The Ag2Se–HgSe–GeSe2 system and crystal structures of the compounds. *Journal of Alloys and Compounds*, **2003**, 351, 135-144	5.7	14
128	Electrical and photoelectrical properties of CuInS2–ZnIn2S4 solid solutions. *Journal of Alloys and Compounds*, **2013**, 553, 48-52	5.7	13
127	Photo induced anisotropy in the AgGaGe3Se8:Cu chalcogenide crystals. *Materials Letters*, **2013**, 107, 218-220	3.3	13
126	Crystal structure of the Ag6Hg0.82GeS5.82 compound. *Journal of Alloys and Compounds*, **2001**, 327, 100-103	5.7	13
125	Synthesis and structure of novel Ag2Ga2SiSe6 crystals: promising materials for dynamic holographic image recording. *RSC Advances*, **2016**, 6, 90958-90966	3.7	13
124	Electronic structure and laser induced piezoelectricity of a new quaternary compound TlInGe3S8. *Materials Chemistry and Physics*, **2018**, 204, 336-344	4.4	12
123	Single crystal growth, electronic structure and optical properties of Cs2HgBr4. *Journal of Physics and Chemistry of Solids*, **2015**, 85, 254-263	3.9	12
122	Origin of electronic properties of PbGa2Se4 crystal: Experimental and theoretical investigations. *Journal of Alloys and Compounds*, **2015**, 633, 415-423	5.7	12
121	The AgGaS2 + 2CdSe <=> AgGaSe2 + 2CdS system. *Journal of Alloys and Compounds*, **2004**, 367, 25-35	5.7	12
120	Single-crystal growth of Cu2CdGeS4. *Journal of Crystal Growth*, **2005**, 275, e159-e162	1.6	12
119	Single crystal growth and properties of AgGaGeS4. *Journal of Crystal Growth*, **2005**, 275, e1983-e1985	1.6	12
118	Single crystal growth, structure and properties of TlHgBr3. *Optical Materials*, **2015**, 49, 94-99	3.3	11
117	Novel AgGa 0.95 In 0.05 Ge 3 Se 8 crystalline alloys for light-operated piezoelectricity. *Journal of Alloys and Compounds*, **2016**, 658, 408-413	5.7	11
116	First-principles DFT calculations of the electronic structure and optical properties of TlInGe2Se6, a prospective NLO material. *Materials Chemistry and Physics*, **2018**, 219, 162-174	4.4	11
115	Laser-induced piezoelectric effects in chalcogenide crystals. *Physica B: Condensed Matter*, **2013**, 423, 60-63	2.8	11
114	Concentration dependence of the optical properties of glassy alloys in the HgS-Ga2S3-GeS2 system. *Glass Physics and Chemistry*, **2010**, 36, 27-32	0.7	11
113	The Cu2Se–HgSe–SnSe2 system. *Journal of Alloys and Compounds*, **1999**, 287, 197-205	5.7	11

112	TlInGe2S6, A Prospective Nonlinear Optical Material: First-Principles DFT Calculations of the Electronic Structure and Optical Properties. *Journal of Electronic Materials*, **2018**, 47, 5525-5536	1.9	11
111	Synthesis, structural, electronic and linear electro-optical features of new quaternary Ag2Ga2SiS6 compound. *Journal of Solid State Chemistry*, **2017**, 246, 363-371	3.3	10
110	IR-induced features of AgGaGeS4 crystalline semiconductors. *Journal of Physics and Chemistry of Solids*, **2012**, 73, 439-443	3.9	10
109	IR laser induced spectral kinetics of AgGaGe3Se8:Cu chalcogenide crystals. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2013**, 111, 142-9	4.4	10
108	Synthesis and spectral features of Ag2SnS3 crystals. *Materials Chemistry and Physics*, **2012**, 135, 249-253	4.4	10
107	Quasi-ternary system Cu2GeS3□u2SnS3□dS. *Journal of Alloys and Compounds*, **2009**, 484, 147-153	5.7	10
106	New compounds Cu2MnTi3S8 and Cu2NiTi3S8 with thiospinel structure. *Materials Research Bulletin*, **2007**, 42, 143-148	5.1	10
105	Electronic, Optical and Elastic Properties of Cu2CdGeSe4: A First-Principles Study. *Journal of Electronic Materials*, **2019**, 48, 705-715	1.9	10
104	Thallium indium germanium sulphide (TlInGe2S6) as efficient material for nonlinear optical application. *Journal of Alloys and Compounds*, **2018**, 735, 1694-1702	5.7	10
103	Specific features of photoconductivity and photoinduced piezoelectricity in AgGaGe 3 Se 8 doped crystals. *Optical Materials*, **2017**, 63, 197-206	3.3	9
102	Structural and optical properties of novel optoelectronic Tl1□In1□SixSe2 single crystals. *Journal of Materials Science: Materials in Electronics*, **2014**, 25, 3226-3232	2.1	9
101	Electronic and optical features of the mixed crystals Ag0.5Pb1.75Ge(S1□Sex)4. *Journal of Materials Chemistry C*, **2013**, 1, 4667	7.1	9
100	The reciprocal system Cu2GeS3+3CdSe<=>Cu2GeSe3+3CdS. *Journal of Alloys and Compounds*, **2009**, 473, 94-99	5.7	9
99	Interaction of argyrodite family compounds with the chalcogenides of II-b elements. *Journal of Alloys and Compounds*, **2006**, 421, 98-104	5.7	9
98	The reciprocal CuInS2+2CdSe<=>CuInSe2+2CdS system. Part I. The quasi-binary CuInSe2□dSe system: Phase diagram and crystal structure of solid solutions. *Journal of Solid State Chemistry*, **2006**, 179, 315-322	3.3	9
97	Crystal structures of the Ag6HgGeSe6 and Ag6HgSiSe6 compounds. *Journal of Alloys and Compounds*, **2002**, 343, 116-121	5.7	9
96	Electronic band structure and basic optical constants of TlGaSn2Se6, a promising NLO semiconductor: First-principles calculations under DFT framework. *Optik*, **2019**, 181, 673-685	2.5	9
95	Tl10Hg3Cl16: Single crystal growth, electronic structure and piezoelectric properties. *Journal of Solid State Chemistry*, **2016**, 242, 193-198	3.3	8

94	Optoelectronic features of novel infrared CuInS2–In2S4 crystalline alloys. *Journal of Materials Science: Materials in Electronics*, **2014**, 25, 163-167	2.1	8
93	New quaternary thallium indium germanium selenide TlInGe2Se6: Crystal and electronic structure. *Journal of Solid State Chemistry*, **2017**, 254, 103-108	3.3	8
92	Physico-chemical interaction in the Tl2Se–HgSe–DIVSe2 systems (DIV – Si, Sn). *Materials Research Bulletin*, **2012**, 47, 3830-3834	5.1	8
91	Spectral and conductivity features of novel ternary Tl1–xIn1–xSnxS2 crystals. *Crystal Research and Technology*, **2013**, 48, 464-475	1.3	8
90	Phase diagram of the CdGa2Se4–Bi2Se3 system and growth of CdGa2Se4 single crystals. *Journal of Alloys and Compounds*, **2006**, 417, 127-130	5.7	8
89	Phase diagram of the CuGaSe2–SiSe2 and CuInSe2–SiSe2 systems. *Journal of Alloys and Compounds*, **2006**, 420, 54-57	5.7	8
88	The Cu2Se–HgSe–In2Se3 system at 670 K. *Journal of Alloys and Compounds*, **2000**, 302, 173-176	5.7	8
87	Phase relations of the Ag2SnS3–HgS and Ag33.3Sn16.7Se/Te/50–HgSe/Te/ section in Ag–Hg–Sn–S/Se,Te/ systems. *Journal of Alloys and Compounds*, **1999**, 291, 215-219	5.7	8
86	Calculations within DFT framework of the electronic and optical properties of quaternary sulfide Tl2PbSiS4, a prospective optoelectronic semiconductor. *Computational Condensed Matter*, **2019**, 21, e00392	1.7	7
85	Influence of cation-vacancy defects on the properties of CuInSe2–In2Se4 solid solutions. *Journal of Alloys and Compounds*, **2015**, 618, 712-717	5.7	7
84	Origin of anisotropy of the near band gap absorption in Tl4HgBr6 single crystals. *Journal of Materials Chemistry C*, **2014**, 2, 2779	7.1	7
83	Manifestation of intrinsic defects in the band structures of quaternary chalcogenide Ag2In2SiSe6 and Ag2In2GeSe6 crystals. *CrystEngComm*, **2014**, 16, 9534-9544	3.3	7
82	Photothermal poling of glass complexes Ag2S–Ga2S3–P2S5. *Optics Communications*, **2013**, 307, 1-4	2	7
81	Quasi-ternary system CuGaS2–CuInS2–CdS. *Journal of Alloys and Compounds*, **2010**, 492, 184-189	5.7	7
80	The CuGaSe2–CuInSe2–CdS system and single crystal growth of the – phase. *Journal of Crystal Growth*, **2011**, 318, 332-336	1.6	7
79	Crystal structure of the Hg4SiS6 and Hg4SiSe6 compounds. *Journal of Alloys and Compounds*, **2002**, 347, 115-120	5.7	7
78	Phase equilibria in the AgGaS2–ZnS and AgInS2–ZnS systems. *Journal of Alloys and Compounds*, **2001**, 325, 204-209	5.7	7
77	The phase equilibria in the quasi-ternary HgSe?Ga2Se3?GeSe2 system. *Journal of Alloys and Compounds*, **1996**, 238, 141-148	5.7	7

76	First-principles DFT computation and X-ray spectroscopy study of the electronic band structure and optical constants of Cu2HgGeS4. *Solid State Sciences*, **2020**, 104, 106287	3.4	7
75	Electronic structure and optical properties of Cs2HgCl4: DFT calculations and X-ray photoelectron spectroscopy measurements. *Optical Materials*, **2016**, 60, 169-180	3.3	7
74	Electronic and optical properties of quaternary sulfide Tl2HgSnS4, a promising optoelectronic semiconductor: A combined experimental and theoretical study. *Optical Materials*, **2019**, 92, 294-302	3.3	6
73	The electronic structure of defect chalcopyrite CdGa2Se4 as determined from first principles calculations and X-ray spectroscopy studies. *Journal of Structural Chemistry*, **2015**, 56, 492-496	0.9	6
72	Growth of AgGaGe3□SnxSe8 single crystals with light-operated piezoelectricity. *Materials Letters*, **2015**, 161, 705-707	3.3	6
71	Experimental and theoretical study of Raman scattering spectra of ternary chalcogenides Tl4HgI6, Tl4HgBr6, and TlHgCl3. *Journal of Raman Spectroscopy*, **2018**, 49, 1840-1848	2.3	6
70	Growth and properties of the single AgCd2GaSe4 crystals. *Journal of Crystal Growth*, **2011**, 330, 5-8	1.6	6
69	The CuInSe2□CuGaSe2□CdSe system and crystal growth of the □solid solutions. *Journal of Alloys and Compounds*, **2010**, 505, 101-107	5.7	6
68	The system Ag2Se□Ho2Se3 in the 0□50 mol.% Ho2Se3 range and the crystal structure of two polymorphic forms of AgHoSe2. *Materials Research Bulletin*, **2007**, 42, 1091-1098	5.1	6
67	Crystal structure of the Ag2.66Hg2Sn1.34Se6 and Hg2SnSe4 compounds. *Journal of Alloys and Compounds*, **2002**, 337, 94-98	5.7	6
66	The Cu2Se□CdSe□GeSe2 system. *Journal of Alloys and Compounds*, **2000**, 298, 203-212	5.7	6
65	Simulation within a DFT framework and experimental study of the valence-band electronic structure and optical properties of quaternary selenide Cu2HgSnSe4. *Optik*, **2020**, 202, 163709	2.5	6
64	Electronic structure and optical properties of defect chalcopyrite HgGa2Se4. *Optical Materials*, **2018**, 75, 538-546	3.3	6
63	The Tl2S□PbS□SiS2 system and the crystal and electronic structure of quaternary chalcogenide Tl2PbSiS4. *Materials Chemistry and Physics*, **2017**, 195, 132-142	4.4	5
62	Optically stimulated IR non-linear optical effects in the Tl3PbCl5 nanocrystallites. *Physica E: Low-Dimensional Systems and Nanostructures*, **2015**, 65, 130-134	3	5
61	Quaternary Cu2HgGeSe4 selenide: Its electronic and optical properties as elucidated from TB-mBJ band-structure calculations and XPS and XES measurements. *Chemical Physics*, **2020**, 536, 110821	2.3	5
60	Experimental and theoretical study of the electronic structure and optical spectral features of PbIn6Te10. *RSC Advances*, **2016**, 6, 73107-73117	3.7	5
59	Structural and optical features of novel Tl1□In1□GexSe2 chalcogenide crystals. *Optical Materials*, **2014**, 37, 614-620	3.3	5

58	Tl2SGa2S3GeS2 glasses for optically operated laser third harmonic generation. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 19003-19009	2.1	5
57	Phase equilibria in the quasi-ternary system Ag2SIn2S3CdS at 870 K. *Journal of Alloys and Compounds*, **2009**, 480, 360-364	5.7	5
56	Effect of doping with transition and rare-earth metals on the electrical and optical properties of AgGaGe3Se8 single crystals. *Inorganic Materials*, **2008**, 44, 361-365	0.9	5
55	The reciprocal CuInS2+2CdSe<=>CuInSe2+2CdS systemPart II: LiquidSolid equilibria in the system. *Journal of Solid State Chemistry*, **2006**, 179, 2998-3006	3.3	5
54	The Cu2SHgSGeS2 system at 670 K and the crystal structure of the Cu6Hg0.92GeS5.92 compound. *Journal of Alloys and Compounds*, **2002**, 333, 143-146	5.7	5
53	Crystal structures of the Cu6Hg0.973SiS5.973 and Ag6Hg0.897SiS5.897 compounds. *Journal of Alloys and Compounds*, **2002**, 335, 111-114	5.7	5
52	The reciprocal system CuGaS2+CuInSe2DCuGaSe2+CuInS2. *Chemistry of Metals and Alloys*, **2010**, 3, 18-231	1	5
51	A Novel Effect of CO2 Laser Induced Piezoelectricity in Ag2Ga2SiS6 Chalcogenide Crystals. *Crystals*, **2016**, 6, 107	2.3	5
50	Electronic structure and basic optical constants of TlHgBr3: Density functional theory calculations. *Optical Materials*, **2018**, 86, 191-197	3.3	5
49	Vibrational spectroscopy of orthorhombic Cu2ZnSiS4 single crystal: Low-temperature polarized Raman scattering and first principle calculations. *Vibrational Spectroscopy*, **2017**, 89, 81-84	2.1	4
48	Optical absorption, piezoelectric effect and second harmonic generation studies of single crystal AgGaGe3Se7.6Te0.4 solid solution. *Applied Physics A: Materials Science and Processing*, **2017**, 123, 1	2.6	4
47	Valence-band electronic structure and main optical properties of Cu2HgGeTe4: Theoretical simulation within a DFT framework and experimental XPS study. *Materials Today Communications*, **2020**, 23, 100828	2.5	4
46	Photoconductivity and laser operated piezoelectricity the Ag-Ga-Ge-(S,Se) crystals and solid solutions. *Materials Science in Semiconductor Processing*, **2018**, 86, 101-110	4.3	4
45	Electronic band-structure and optical constants of Pb2GeS4: Ab initio calculations and X-ray spectroscopy experiments. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 16088-16100	2.1	4
44	SolidLiquid equilibria in the quasi-ternary system CdSGa2S3GeS2. *Journal of Alloys and Compounds*, **2006**, 421, 91-97	5.7	4
43	Phase diagrams of the Ag2SeZn(Cd)SeSiSe2 systems and crystal structure of the Cd4SiSe6 compound. *Journal of Alloys and Compounds*, **2003**, 354, 138-142	5.7	4
42	Preparation and crystal structure of the Cu9GeS6 (x=0.579) compound. *Journal of Alloys and Compounds*, **2002**, 333, 109-112	5.7	4
41	Glass formation and optical properties of the glasses in the Ag2SHgSGeS2 system. *Chemistry of Metals and Alloys*, **2009**, 2, 49-54	1	4

40	New cation-disordered quaternary selenides Tl2Ga2TtSe6 (Tt=Ge, Sn). *Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences*, **2020**, 75, 135-142	1	4
39	Electronic structure and optical constants of CsPbCl3: The effect of approaches within ab initio calculations in relation to X-ray spectroscopy experiments. *Materials Chemistry and Physics*, **2021**, 261, 124216	4.4	4
38	DFT calculations and experimental studies of the electronic structure and optical properties of Tl4PbI6. *Optical Materials*, **2021**, 114, 110982	3.3	4
37	Electrical properties and electronic structure of Cu1−2xZnxInSe2 and Cu1−2xZnxInS2 single crystals. *Journal of Physics and Chemistry of Solids*, **2015**, 82, 42-49	3.9	3
36	AgGaSiSe4: Growth, crystal and band electronic structure, optoelectronic and piezoelectric properties. *Materials Research Bulletin*, **2017**, 95, 177-184	5.1	3
35	Soft-mode-driven lattice instabilities in Cs2HgCl4 crystal: phenomenological treatment and far-infrared spectroscopy of the structurally modulated phases. *Journal of Physics Condensed Matter*, **2012**, 24, 245901	1.8	3
34	Quaternary thiospinel CuCrTiS4 as an electroactive material for copper(II)-sensitive and selective electrode. *Materials Science and Engineering C*, **2008**, 28, 1112-1116	8.3	3
33	Optical and photoelectrical properties of AgCd2GaS4 single-crystal compounds. *Semiconductors*, **2008**, 42, 508-513	0.7	3
32	Synthesis and X-ray powder diffraction studies of semiconducting alloys in the system AgCd2-xZnxGaS4. *Crystal Research and Technology*, **2006**, 41, 32-36	1.3	3
31	Phase relations in the ZnSe□a2Se3□eSe2 system. *Journal of Alloys and Compounds*, **2003**, 351, 171-175	5.7	3
30	Phase equilibria in the quasi-ternary ZnSe□a2Se3□nSe2 system. *Journal of Alloys and Compounds*, **2004**, 379, 143-147	5.7	3
29	Laser operated piezoelectricity in Ag0.5Pb1.75GeS4 and Ag0.5Pb1.75GeS3Se crystals. *Journal of Materials Science: Materials in Electronics*, **2016**, 27, 9589-9592	2.1	3
28	Raman Scattering Study of Mixed Quaternary AgxGaxGe1−xSe2 (0.167 ≤ x ≤ 0.333) Crystals. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1700230	1.3	3
27	Synthesis, electronic structure and optical properties of PbBr 1.2 I 0.8. *Journal of Electron Spectroscopy and Related Phenomena*, **2017**, 218, 13-20	1.7	2
26	Photoconductivity relaxation processes in Cu1−2xZnxInS2 solid solutions. *Materials Science in Semiconductor Processing*, **2015**, 39, 665-670	4.3	2
25	Photoinduced Optical Properties Of Tl1−xIn1−xSixSe2 Single Crystals. *Archives of Metallurgy and Materials*, **2015**, 60, 1051-1055		2
24	Influence of cation-vacancy imperfection on the electrical and photoelectric properties of the Cu1 − x Zn x InS2 alloy. *Semiconductors*, **2014**, 48, 286-291	0.7	2
23	Specific features of the low-temperature conductivity and photoconductivity of CuInSe2-ZnIn2Se4 alloys. *Semiconductors*, **2014**, 48, 727-732	0.7	2

22	The CdSe□Ga2Se3□PbSe system. *Journal of Alloys and Compounds*, **2008**, 453, 115-120	5.7	2
21	AgCrTiS4: Synthesis, Properties, and Analytical Application. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2008**, 39, 155-159	2.5	2
20	Phase equilibria in the HgS□Ga2S3□GeS2 system. *Journal of Alloys and Compounds*, **2006**, 417, 131-137	5.7	2
19	Phase equilibria in the CdGa2Se4□PbSe and CdGa2Se4□As2Se3 systems. *Journal of Alloys and Compounds*, **2006**, 425, 206-209	5.7	2
18	Phase equilibria in the Tl2S□PbS□GeS2 system and crystal structure of Tl0.5Pb1.75GeS4. *Chemistry of Metals and Alloys*, **2012**, 5, 37-41	1	2
17	The effect of composition on photoconductivity and nonlinear optical properties in the acentric Ag2In2AB6 (A = Si, Ge, B = S, Se) crystals. *Optik*, **2019**, 179, 948-956	2.5	2
16	Preparation, electronic structure and piezooptical properties of solid solutions Tl3PbBr5□ *Materials Chemistry and Physics*, **2019**, 227, 255-264	4.4	1
15	Solid-state solutions of copper indium disulfide and zinc indium tetrasulfide: Growth, crystallography and opto-electronic properties. *Materials Science in Semiconductor Processing*, **2014**, 24, 231-236	4.3	1
14	IR laser induced spectra in novel crystals CdTe-CuInTe2. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2013**, 116, 446-50	4.4	1
13	Photoconductivity relaxation processes in AgCd2GaS4 single crystals. *Materials Chemistry and Physics*, **2017**, 200, 250-256	4.4	1
12	Growth and Analysis of Nanostructured CuInSe2-ZnIn2Se4 Solid Solutions: Their Electrical and Photoelectrical Properties. *Materials Today: Proceedings*, **2015**, 2, 178-192	1.4	1
11	Crystal structure of the new quaternary copper manganese and zirconium chalcogenides. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 1288-1295	1.3	1
10	Enhanced persistent photoconduction in CuInS2□In2S4 alloys single crystals and processes of its relaxation. *Molecular Crystals and Liquid Crystals*, **2016**, 627, 153-162	0.5	1
9	The crystal structure of novel silver sulphogermanate Ag10Ge3S11. *Journal of Alloys and Compounds*, **2013**, 576, 134-139	5.7	0
8	Crystal structure of the Cu5.976Hg0.972SiSe6 compound. *Journal of Alloys and Compounds*, **2004**, 367, 121-125	5.7	0
7	Two-photon absorption of Tl1-xIn1-xSnxSe2nanocrystallites. *EPJ Web of Conferences*, **2017**, 133, 03001	0.3	
6	Influence of technological defects on the optical and photoelectric properties of AgCd2 □x Mn x GaSe4 alloys. *Semiconductors*, **2012**, 46, 306-311	0.7	
5	Transport Phenomena In Single Crystals Tl1□In1□GeXSe2 (x=0.1, 0.2). *Archives of Metallurgy and Materials*, **2015**, 60, 2025-2028		

4	CuInS2-ZnIn2S4 Solid Solutions: Growth, Physical and Photo-electrical Properties. *Molecular Crystals and Liquid Crystals*, **2014**, 604, 164-173	0.5
3	Phase equilibria in the systems AgInSe2-HgIn2Se4 and AgInSe2-HgSe. *Inorganic Materials*, **2010**, 46, 609-613	0.9
2	The Cu2SeHgSeIn2Se3 quasi-ternary system. *Journal of Alloys and Compounds*, **2000**, 309, 165-171	5.7
1	Influence of Cu-, Sn-, and In-Doping on Optical Properties of AgGaGe3 Se8 Single Crystals. *Ukrainian Journal of Physics*, **2016**, 61, 606-612	0.4