Bayrammurad I Saparov

List of Publications by Year
in descending order

69	6,836	109137 35	88477 70
papers	citations	h-index	g-index

82	82	82	8428
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Organicâ€“Inorganic Perovskites: Structural Versatility for Functional Materials Design. Chemical Reviews, 2016, 116, 4558-4596.	23.0	2,147
2	Thin-Film Preparation and Characterization of Cs₃Sb₂I₉: A Lead-Free Layered Perovskite Semiconductor. Chemistry of Materials, 2015, 27, 5622-5632.	3.2	653
3	Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. Advanced Materials, 2016, 28, 5214-5221.	11.1	487
4	Thin-Film Deposition and Characterization of a Sn-Deficient Perovskite Derivative Cs₂SnI₆. Chemistry of Materials, 2016, 28, 2315-2322.	3.2	329
5	Defect Engineering in Multinary Earthâ€Abundant Chalcogenide Photovoltaic Materials. Advanced Energy Materials, 2017, 7, 1602366.	10.2	250
6	Near-Unity Photoluminescence Quantum Yield in Blue-Emitting Cs₃Cu₂Br_{5â€“x}I_x (0 â‰¤ x â‰¤ 5). ACS Applied Electronic Materials, 2019, 1, 269-274.	2.0	184
7	Alloying and Defect Control within Chalcogenide Perovskites for Optimized Photovoltaic Application. Chemistry of Materials, 2016, 28, 821-829.	3.2	175
8	Unraveling luminescence mechanisms in zero-dimensional halide perovskites. Journal of Materials Chemistry C, 2018, 6, 6398-6405.	2.7	168
9	Bright Luminescence from Nontoxic CsCu₂X₃ (X = Cl, Br, I). , 2019, 1, 459-465.		148
10	Hybrid Organicâ€“Inorganic Halides (C₅H₇N₂)₂MBr₄ (M = Hg, Zn) with High Color Rendering Index and High-Efficiency White-Light Emission. Chemistry of Materials, 2019, 31, 2983-2991.	3.2	143
11	Photovoltaic Properties of Two-Dimensional (CH₃NH₃)₂Pb(SCN)₂I₂ Perovskite: A Combined Experimental and Density Functional Theory Study. Journal of Physical Chemistry Letters, 2016, 7, 1213-1218.	2.1	135
12	BaCu₂Sn(S,Se)₄: Earth-Abundant Chalcogenides for Thin-Film Photovoltaics. Chemistry of Materials, 2016, 28, 4771-4780.	3.2	131
13	K₂CuX₃ (X = Cl, Br): All-Inorganic Lead-Free Blue Emitters with Near-Unity Photoluminescence Quantum Yield. Chemistry of Materials, 2020, 32, 6197-6205.	3.2	109
14	I₂â€“IIâ€“IVâ€“VI₄ (I = Cu, Ag; II = Sr, Ba; IV = Ge, Sn; VI = S, Se): Chalcogenides for Thin-Film Photovoltaics. Chemistry of Materials, 2017, 29, 7868-7879.	3.2	87
15	Rb₂CuX₃ (X = Cl, Br): 1D Allâ€Inorganic Copper Halides with Ultrabright Blue Emission and Upâ€Conversion Photoluminescence. Advanced Optical Materials, 2020, 8, 1901338.	3.6	86
16	Efficient Generation of Longâ€Lived Triplet Excitons in 2D Hybrid Perovskite. Advanced Materials, 2017, 29, 1604278.	11.1	81
17	Synthesis, Crystal and Electronic Structures, and Optical Properties of (CH₃NH₃)₂CdX₄ (X = Cl, Br, I). Inorganic Chemistry, 2017, 56, 13878-13888.	1.9	78
18	Viability of Lead-Free Perovskites with Mixed Chalcogen and Halogen Anions for Photovoltaic Applications. Journal of Physical Chemistry C, 2016, 120, 6435-6441.	1.5	72

#	Article	IF	Citations
19	Broadband Emission in Hybrid Organicâ€“Inorganic Halides of Group 12 Metals. ACS Omega, 2018, 3, 18791-18802.	1.6	70
20	Synthesis, crystallographic and theoretical studies of the new Zintl phases Ba2Cd2Pn3 (Pn = As, Sb), and the solid solutions (Ba_{1â€“x}Sr_x)₂Cd₂Sb₃and Ba₂Cd₂(Sb_{1â€“x}As_x)₃. Dalton Transactions, 2010, 39, 1063-1070.	1.6	67
21	Isolated _{âˆž}¹[ZnPn₂]^{4â^’} Chains in the Zintl Phases Ba₂ZnPn₂ (Pn = As, Sb, Bi)â€”Synthesis, Structure, and Bonding. Inorganic Chemistry, 2010, 49, 5173-5179.	1.9	62
22	Ferromagnetism of Fe3Sn and Alloys. Scientific Reports, 2014, 4, 7024.	1.6	62
23	Spin glass and semiconducting behavior in one-dimensional BaFe2â^Î´Se3(Î´â‰ˆ0.2)crystals. Physical Review B, 2011, 84, .	1.1	58
24	Highly Efficient Broad-Band Luminescence Involving Organic and Inorganic Molecules in a Zero-Dimensional Hybrid Lead Chloride. Journal of Physical Chemistry C, 2019, 123, 22470-22477.	1.5	57
25	Synthesis, Crystal Structures and Properties of the Zintl Phases Sr₂ZnP₂, Sr₂ZnAs₂, A₂ZnSb₂ and A₂ZnBi₂ (A = Sr and Eu). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2011, 637, 2018-2025.	0.6	55
26	Synthesis, structure and physical properties of the new Zintl phases Eu11Zn6Sb12 and Eu11Cd6Sb12. Journal of Solid State Chemistry, 2008, 181, 2690-2696.	1.4	51
27	Properties of binary transition-metal arsenides (TAs). Superconductor Science and Technology, 2012, 25, 084016.	1.8	51
28	Synthesis, Structure, and Bonding of the Zintl Phase Ba3Cd2Sb4. Inorganic Chemistry, 2008, 47, 11237-11244.	1.9	50
29	Compositionâ€Dependent Photoluminescence Properties and Antiâ€Counterfeiting Applications of A₂AgX₃ (AÂ=ÂRb, Cs; XÂ= ÂCl, Br, I). Advanced Functional Materials, 2021, 31, 2104941.	7.8	50
30	Zero-Dimensional Hybrid Organicâ€“Inorganic Indium Bromide with Blue Emission. Inorganic Chemistry, 2021, 60, 1045-1054.	1.9	48
31	Lead-Free Halide Light-Emitting Diodes with External Quantum Efficiency Exceeding 7% Using Hostâ€“Dopant Strategy. ACS Energy Letters, 2021, 6, 2584-2593.	8.8	48
32	Local Inhomogeneity and Filamentary Superconductivity in Pr-DopedCaFe2As2. Physical Review Letters, 2014, 112, 047005.	2.9	41
33	Complex structures of different CaFe2As2 samples. Scientific Reports, 2014, 4, 4120.	1.6	41
34	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 Sr2â€“xAxCdSb2, Ba2â€“xAxCdSb2 and Eu2â€“xYbxCdSb2. Journal of Solid State Chemistry, 2011, 184, 432-440.	1.4	39
35	Crystals, magnetic and electronic properties of a new ThCr2Si2-type BaMn2Bi2 and K-doped compositions. Journal of Solid State Chemistry, 2013, 204, 32-39.	1.4	37
36	2Flux growth and characterization of Ce-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0047.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Nd</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mrow><mml:mi mathvariant="normal">B</mml:mi></mml:mrow></mml:math> single crystals. Journal of Magnetism and Magnetic Materials, 2017, 434, 1-9.	1.0	36

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37	Rb₄Ag₂BiBr₉: A Lead-Free Visible Light Absorbing Halide Semiconductor with Improved Stability. Inorganic Chemistry, 2019, 58, 4446-4455.	1.9	35
38	Next Generation Thin-Film Solar Absorbers Based on Chalcogenides. Chemical Reviews, 2022, 122, 10575-10577.	23.0	32
39	Effect of molybdenum4dhole substitution in BaFe2As2. Physical Review B, 2012, 85, .	1.1	27
40	Crystal, magnetic and electronic structures and properties of new BaMnPnF (Pn = As, Sb, Bi). Scientific Reports, 2013, 3, 2154.	1.6	27
41	New quaternary Zintl phases â€“ Synthesis, crystal and electronic structures of KA2Cd2Sb3 (A=Ca, Sr,) Tj ETQq1 1 0.784314 rgBT /Over	1.0	25
42	Metallic properties of Ba2Cu3P4 and BaCu2Pn2 (Pn=As, Sb). Journal of Solid State Chemistry, 2012, 191, 213-219.	1.4	22
43	The Ternary Alkaline-Earth Metal Manganese Bismuthides Sr₂MnBi₂ and Ba₂Mn_{1â€“x}Bi₂ (x â‰ˆ 0.15). Inorganic Chemistry, 2017, 56, 12369-12378.	1.9	22
44	Cu Substitution Effects on the Local Magnetic Properties ofBa(Fe1â^'xCux)2As2: A Site-SelectiveAs75andCu63NMR Study. Physical Review Letters, 2014, 113, 117001.	2.9	20
45	Undecaeuropium hexazinc dodecaarsenide. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, i24-i24.	0.2	17
46	Synthesis, crystal and electronic structures of the new quaternary phases A5Cd2Sb5F (A = Sr, Ba, Eu), and Ba5Cd2Sb5Ox (0.5<x<0.7). Dalton Transactions, 2010, 39, 11335.	1.6	17
47	Charge carrier mobility of halide perovskite single crystals for ionizing radiation detection. Applied Physics Letters, 2021, 119, .	1.5	17
48	Tetragonal and collapsed-tetragonal phases of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CaFe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> A view from angle-resolved photoemission and dynamical mean-field theory. Physical Review B, 2016, 93, .	1.1	16
49	Exploratory Work in the Quaternary System of Caâ€“Euâ€“Cdâ€“Sb: Synthesis, Crystal, and Electronic Structures of New Zintl Solid Solutions. Materials, 2018, 11, 2146.	1.3	15
50	(CH 3 NH 3)AuX 4 â‹…H 2 O (X=Cl, Br) and (CH 3 NH 3)AuCl 4 : Lowâ€Band Gap Leadâ€Free Layered Gold Halide Perovskite Materials. Chemistry - A European Journal, 2019, 25, 9875-9884.	1.7	15
51	(NH₄)₂AgX₃ (X = Br, I): 1D Silver Halides with Broadband White Light Emission and Improved Stability. ACS Materials Au, 2021, 1, 62-68.	2.6	14
52	Annealing effects on the properties of BFe₂As₂ (B = Ca, Sr, Ba) superconducting parents. Dalton Transactions, 2014, 43, 14971-14975.	1.6	12
53	Physical Properties of Candidate X-ray Detector Material Rb₄Ag₂BiBr₉. Crystal Growth and Design, 2022, 22, 1066-1072.	1.4	12
54	Additive-assisted synthesis and optoelectronic properties of (CH3NH3)4Bi6I22. Inorganic Chemistry Frontiers, 2020, 7, 1564-1572.	3.0	11

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55	(C₇H₁₁N₂)₂MBr₄ (M=Cu, Zn): Xâ€Ray Sensitive 0D Hybrid Metal Halides with Tunable Broadband Emission. European Journal of Inorganic Chemistry, 2022, 2022, e202100954.	1.0	11
56	Zinc-deficiency in intermetallics with the NaZn13 type. Journal of Alloys and Compounds, 2008, 463, 119-123.	2.8	10
57	Roomâ€Temperature Ba(Fe_{1â^'x}Co_x)₂As₂ is not Tetragonal: Direct Observation of Magnetoelastic Interactions in Pnictide Superconductors. Advanced Materials, 2015, 27, 2715-2721.	11.1	10
58	Optoelectronic properties of candidate photovoltaic Cu2PbSiS4, Ag2PbGeS4 and KAg2SbS4 semiconductors. Journal of Alloys and Compounds, 2018, 746, 405-412.	2.8	10
59	Synthesis, crystal and electronic structures and optical properties of (HIm)2Hg3Cl8 and (HIm)HgI3 (HIm = imidazolium). Journal of Solid State Chemistry, 2018, 258, 551-558.	1.4	10
60	Ternary chalcogenides<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">s</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">Z</mml:mi><mml:msub><mml:mi xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow /><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Antiferromagnetism and the emergence of frustration in the sawtooth lattice chalcogenide olivines	1.1	9
61		1.1	8
62			