Ryan E Baumbach

List of Publications by Year
in descending order

45 papers	954 citations	623734 14 h-index	454955 30 g-index
45 all docs	45 docs citations	45 times ranked	1496 citing authors

#	Article	IF	Citations
1	Cyclopentadienyl coordination induces unexpected ionic Amâ"N bonding in an americium bipyridyl complex. Nature Communications, 2022, 13, 201.	12.8	8
2	Electronic Tuning in URu2Si2 Through Ru to Pt Chemical Substitution. Frontiers in Electronic Materials, 2022, 2, .	3.1	1
3	Structures and Magnetic Properties of K₂Pd₄U₆S₁₇, K₂Pt₄U₆S₁₇, Rb₂Pt₄U₆S₁₇, and Cs₂Pt₄U₆S₁₇ Synthesized Using the Boronâ€“Chalcogen Mixture Method. Inorganic Chemistry, 2022, 61, 10502-10508.	4.0	5
4	Layer- and gate-tunable spin-orbit coupling in a high-mobility few-layer semiconductor. Science Advances, 2021, 7, .	10.3	16
5	Fantastic n = 4: Ce5Co4+xGe13â"ySny of the An+1MnX3n+1 homologous series. Journal of Chemical Physics, 2021, 154, 114707.	3.0	3
6	Unexpected Hydride: Ce4B2C2H2.42, a Stuffed Variant of the Nd2BC Structure Type. Crystal Growth and Design, 2021, 21, 5164-5171.	3.0	3
7	An_{1.33}T₄Al₈Si₂ (An = Ce, Th, U, Np; T = Ni, Co): Actinide Intermetallics with Disordered Gd_{1+x}Fe₄Si_{10â€“y} Structure Type Grown from Metal Flux. Inorganic Chemistry, 2021, 60, 13062-13070.	4.0	1
8	Using Redox-Active Ligands to Generate Actinide Ligand Radical Species. Inorganic Chemistry, 2021, 60, 15242-15252.	4.0	19
9	Understanding the Stabilization and Tunability of Divalent Europium 2.2.2B Cryptates. Inorganic Chemistry, 2021, 60, 7815-7826.	4.0	16
10	Creation of an unexpected plane of enhanced covalency in cerium(III) and berkelium(III) terpyridyl complexes. Nature Communications, 2021, 12, 7230.	12.8	11
11	Synthesis of a d2 kagome lattice antiferromagnet, (CH3NH3)2NaV3F12. Chemical Science, 2020, 11, 11811-11817.	7.4	2
12	Superstructures and Superconductivity Linked with Pd Intercalation in Nb₂Pd_xSe₅. Chemistry of Materials, 2020, 32, 8361-8366.	6.7	1
13	Employing Lewis Acidity to Generate Bimetallic Lanthanide Complexes. Inorganic Chemistry, 2020, 59, 8642-8646.	4.0	4
14	One-component order parameter in URu ₂ Si ₂ uncovered by resonant ultrasound spectroscopy and machine learning. Science Advances, 2020, 6, eaaz4074.	10.3	33
15	Magnesium-Based Flux Growth and Structural Relationships of a Large Family of Tetrelide Semimetals. Crystal Growth and Design, 2020, 20, 2632-2643.	3.0	0
16	A Novel Magnetic Material by Design: Observation of Yb³⁺ with Spin-1/2 in Yb_xPt₅P. ACS Central Science, 2020, 6, 2023-2030.	11.3	8
17	Structural, Electronic, and Thermal Properties of CdSnAs₂. Inorganic Chemistry, 2020, 59, 3079-3084.	4.0	5
18	Flux Synthesis of MgNi₂Bi₄ and Its Structural Relationship to NiBi₃. Inorganic Chemistry, 2020, 59, 3452-3458.	4.0	2

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19	Influence of hydrostatic pressure on hidden order, the Kondo lattice, and magnetism in URu2Si2â˜xPx. Physical Review B, 2020, 102, .	3.2	2
20	Electronic and magnetic properties of EuNi_{2â˜Î´}Sb₂ structural variants. Journal of Physics Condensed Matter, 2020, 32, 315801.	1.8	2
21	Structural Disorder in Intermetallic Boride Pr₂₁M₁₆Te₆B₃₀ (M = Mn, Fe): A Transition Metal Cluster and Its Evil Twin. Inorganic Chemistry, 2020, 59, 2484-2494.	4.0	2
22	U_{1.33}T₄Al₈Si₂ (T = Ni, Co): Complex Uranium Silicides Grown from Aluminum/Gallium Flux Mixtures. Inorganic Chemistry, 2019, 58, 12209-12217.	4.0	7
23	A novel cage for actinides:A₆W₄Al₄₃(Aâ€‰â€‰=â€‰â€‰U and Pu). Journal of Physics Condensed Matter, 2019, 31, 165601.	1.8	1
24	Enhanced thermoelectric performance of heavy-fermion compounds Yb TM ₂ Zn ₂₀ (TM = Co, Rh, Ir) at low temperatures. Science Advances, 2019, 5, eaaw6183.	10.3	11
25	Electronic, Magnetic, and Theoretical Characterization of (NH₄)₄UF₈, a Simple Molecular Uranium(IV) Fluoride. Inorganic Chemistry, 2019, 58, 637-647.	4.0	12
26	One-dimensional tellurium chains: Crystal structure and thermodynamic properties of PrCuxTe2 (x ~) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.9	1
27	Uncovering the Origin of Divergence in the CsM(CrO₄)₂ (M = La, Pr, Nd, Sm,) Tj ETQq1 1 0.784314 rgBT /Ove Structure Analysis. Journal of the American Chemical Society, 2018, 140, 1674-1685.	13.7	14
28	U₈Al₁₉Si₆, A Uranium Aluminide Silicide with a Stuffed Supercell Grown from Aluminum Flux. Chemistry of Materials, 2018, 30, 3806-3812.	6.7	2
29	Incipient class II mixed valency in a plutonium solid-state compound. Nature Chemistry, 2017, 9, 856-861.	13.6	28
30	Phase diagram of URu _{2â€“ x} Fe _x Si ₂ in high magnetic fields. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9826-9831.	7.1	12
31	Uranium(IV) Chloride Complexes: UCl₆^{2â€“} and an Unprecedented U(H₂O)₄Cl₄ Structural Unit. Inorganic Chemistry, 2017, 56, 9772-9780.	4.0	21
32	Electronic Structure and Properties of Berkelium Iodates. Journal of the American Chemical Society, 2017, 139, 13361-13375.	13.7	25
33	Single Crystal Growth of URu2Si2 by the Modified Bridgman Technique. Crystals, 2016, 6, 128.	2.2	4
34	Quasi-particle interference of heavy fermions in resonant x-ray scattering. Science Advances, 2016, 2, e1601086.	10.3	4
35	Anomalous local magnetism in the 4f-localized ferromagnets CeRu2X2B (X = Al, Ga) revealed by using ZF-Î¼SR. Journal of the Korean Physical Society, 2016, 68, 1200-1205.	0.7	0
36	Monomers, Dimers, and Helices: Complexities of Cerium and Plutonium Phenanthrolinecarboxylates. Inorganic Chemistry, 2016, 55, 4373-4380.	4.0	17

#	Article	IF	Citations
37	Characterization of berkelium(III) dipicolinate and borate compounds in solution and the solid state. Science, 2016, 353, .	12.6	86
38	Emergence of californium as the second transitional element in the actinide series. Nature Communications, 2015, 6, 6827.	12.8	108
39	Single-Crystal Growth of a Perovskite Ruthenate SrRuO₃ by the Floating-Zone Method. Crystal Growth and Design, 2015, 15, 5573-5577.	3.0	24
40	Straightforward Reductive Routes to Air-Stable Uranium(III) and Neptunium(III) Materials. Inorganic Chemistry, 2014, 53, 7455-7466.	4.0	12
41	Dimensional and Coordination Number Reductions in a Large Family of Lanthanide Tellurite Sulfates. Inorganic Chemistry, 2014, 53, 8555-8564.	4.0	16
42	Visualizing nodal heavy fermion superconductivity in CeCoIn5. Nature Physics, 2013, 9, 474-479.	16.7	174
43	Crystal structure, magnetism and transport properties of Ce3Ni25.75Ru3.16Al4.1B10. Journal of Solid State Chemistry, 2013, 205, 154-159.	2.9	1
44	Visualizing heavy fermions emerging in a quantum critical Kondo lattice. Nature, 2012, 486, 201-206.	27.8	176
45	Non-Fermi Liquid Regimes and Superconductivity inÂtheÂLow Temperature Phase Diagrams of Strongly Correlated d- and f-Electron Materials. Journal of Low Temperature Physics, 2010, 161, 4-54.	1.4	54