

Saul H Lapidus

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5977917/publications.pdf>

Version: 2024-02-01

117
papers

3,386
citations

159585

30
h-index

161849

54
g-index

125
all docs

125
docs citations

125
times ranked

5607
citing authors

#	ARTICLE	IF	CITATIONS
1	Expanding the Ambient-Pressure Phase Space of CaFe ₂ O ₄ -Type Sodium Postspinel Host "Guest Compounds. ACS Organic & Inorganic Au, 2022, 2, 8-22.	4.0	5
2	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	6.7	10
3	Investigation of Ca Insertion into $\hat{\pm}$ -MoO ₃ Nanoparticles for High Capacity Ca-Ion Cathodes. Nano Letters, 2022, 22, 2228-2235.	9.1	16
4	Facile Electrochemical Mg-Ion Transport in a Defect-Free Spinel Oxide. Chemistry of Materials, 2022, 34, 3789-3797.	6.7	5
5	Competing Charge/Spin-Stripe and Correlated Metal Phases in Trilayer Nickelates (Pr _{1-x} La _x) ₄ Ni ₃ O ₈ . Chemistry of Materials, 2022, 34, 4560-4567.	6.7	4
6	Fe ₃ InSn _x O ₆ (x = 0, 0.25, or 0.5): A Family of Corundum Derivatives with Sn-Induced Polarization and Above Room Temperature Antiferromagnetic Ordering. Chemistry of Materials, 2022, 34, 5020-5029.	6.7	2
7	Investigating the A _{n+1} B _n X _{3n+1} Homologous Series: A New Platform for Studying Magnetic Praseodymium Based Intermetallics. ACS Omega, 2022, 7, 19048-19057.	3.5	2
8	Ultralow Lattice Thermal Conductivity in Metastable Ag ₂ GeS ₃ Revealed by a Combined Experimental and Theoretical Study. Chemistry of Materials, 2022, 34, 6420-6430.	6.7	1
9	Control of crystal size tailors the electrochemical performance of $\hat{\pm}$ -V ₂ O ₅ as a Mg ²⁺ intercalation host. Nanoscale, 2021, 13, 10081-10091.	5.6	7
10	Tl ₂ Ir ₂ O ₇ : A Pauli Paramagnetic Metal, Proximal to a Metal Insulator Transition. Inorganic Chemistry, 2021, 60, 4424-4433.	4.0	5
11	Canting of the Magnetic Moments on the Octahedral Site of an Iron Oxide Garnet in Response to Diamagnetic Cation Substitution. Inorganic Chemistry, 2021, 60, 6249-6254.	4.0	0
12	Nanoscale Phase Separation and Large Refrigerant Capacity in Magnetocaloric Material LaFe _{11.5} Si _{1.5} . Chemistry of Materials, 2021, 33, 2837-2846.	6.7	6
13	Influence of the Cubic Sublattice on Magnetic Coupling between the Tetrahedral Sites of Garnet. Inorganic Chemistry, 2021, 60, 8500-8506.	4.0	2
14	Investigating Ternary Li "Mg "Si Zintl Phase Formation and Evolution for Si Anodes in Li-Ion Batteries with Mg(TFSI) ₂ Electrolyte Additive. Chemistry of Materials, 2021, 33, 4960-4970.	6.7	10
15	Operando X-ray Diffraction Studies of the Mg-Ion Migration Mechanisms in Spinel Cathodes for Rechargeable Mg-Ion Batteries. Journal of the American Chemical Society, 2021, 143, 10649-10658.	13.7	24
16	A Polar Magnetic and Insulating Double Corundum Oxide: Mn ₂ MnSbO ₆ with Ordered Mn(II) and Mn(III) Ions. Chemistry of Materials, 2021, 33, 6522-6529.	6.7	9
17	In Situ Methods for Metal-Flux Synthesis in Inert Environments. Chemistry of Materials, 2021, 33, 7657-7664.	6.7	6
18	Synthesis, structure, linear and nonlinear optical properties of noncentrosymmetric quaternary diamond-like semiconductors, Cu ₂ ZnGeSe ₄ (CZGSe) and the novel Cu ₄ ZnGe ₂ Se ₇ . Journal of Alloys and Compounds, 2021, 888, 161499.	5.5	13

#	ARTICLE	IF	CITATIONS
19	Low temperature structures and magnetic interactions in the organic-based ferromagnetic and metamagnetic polymorphs of decamethylferrocenium 7,7,8,8-tetracyano-p-quinodimethanide, [FeCp* ₂] ⁺ [TCNQ] ⁻ . Dalton Transactions, 2021, 50, 11228-11242.	3.3	6
20	High-Pressure Synthesis of Double Perovskite Ba ₂ NiO ₆ : In Search of a Ferromagnetic Insulator. Inorganic Chemistry, 2021, 60, 1241-1247.	4.0	14
21	Iridate LiIrO ₆ : An Antiferromagnetic Insulator. Inorganic Chemistry, 2021, 60, 17201-17211.	4.0	1
22	Synchrotron Based Measurement of the Temperature Dependent Thermal Expansion Coefficient of Ammonium Perchlorate. Propellants, Explosives, Pyrotechnics, 2020, 45, 480-485.	1.6	3
23	Probing Mg Migration in Spinel Oxides. Chemistry of Materials, 2020, 32, 663-670.	6.7	53
24	Probing Electrochemical Mg-Ion Activity in MgCr ₂ V ₄ O ₄ Spinel Oxides. Chemistry of Materials, 2020, 32, 1162-1171.	6.7	31
25	Exotic hysteresis of ferrimagnetic transition in Laves compound TbCo ₂ . Materials Research Letters, 2020, 8, 97-102.	8.7	8
26	Ambient and High Pressure CuNiSb ₂ : Metal-Ordered and Metal-Disordered NiAs-Type Derivative Pnictides. Inorganic Chemistry, 2020, 59, 14058-14069.	4.0	0
27	High Voltage Mg-Ion Battery Cathode via a Solid Solution CrMn Spinel Oxide. Chemistry of Materials, 2020, 32, 6577-6587.	6.7	48
28	High Capacity for Mg ²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. ACS Energy Letters, 2020, 5, 2721-2727.	17.4	48
29	Synthesis of Antiperovskite Solid Electrolytes: Comparing Li ₃ Si, Na ₃ Si, and Ag ₃ Si. Inorganic Chemistry, 2020, 59, 11244-11247.	4.0	16
30	In situ investigation of phosphonate retarder interaction in oil well cements at elevated temperature and pressure conditions. Journal of the American Ceramic Society, 2020, 103, 6400-6413.	3.8	6
31	Dynamics of Hydroxyl Anions Promotes Lithium Ion Conduction in Antiperovskite Li ₂ OHCl. Chemistry of Materials, 2020, 32, 8481-8491.	6.7	53
32	Measured and simulated thermoelectric properties of FeAs ₂ Se _x (x = 0, 0.4, 1, 2). Journal of Applied Physics, 2020, 123, 045101.	5.4	0
33	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. ACS Energy Letters, 2020, 5, 3203-3211.	17.4	65
34	Enhanced charge storage of nanometric V ₂ O ₅ in Mg electrolytes. Nanoscale, 2020, 12, 22150-22160.	5.6	15
35	Single-Crystal Growth and Room-Temperature Magnetocaloric Effect of X-Type Hexaferrite Sr ₂ Co ₂ Fe ₂₈ O ₄₆ . Inorganic Chemistry, 2020, 59, 6755-6762.	4.0	11
36	Ferrimagnetic Ordering and Anomalous Stoichiometry Observed for the Cubic, Extended 3D Prussian Blue Analogues (NEt ₃ Me) ₂ Mn ^{II} ₅ (CN) ₁₂ and (NEt ₂ Me) ₂ Mn ^{II} ₅ (CN) ₁₂ : A Cation-Adaptive Structure. Chemistry - A European Journal, 2020, 26, 15565-15572.	3.3	1

#	ARTICLE	IF	CITATIONS
37	Synthesis, Crystal Structure, and Cooperative 3d ⁴ –5d Magnetism in Rock Salt Type Li ₄ NiOsO ₆ and Li ₃ Ni ₂ O ₅ O ₆ . <i>Inorganic Chemistry</i> , 2020, 59, 7389-7397.	4.0	2
38	Structure and Negative Thermal Expansion in Zr _{0.3} Sc _{1.7} Mo _{2.7} V _{0.3} O ₁₂ . <i>Inorganic Chemistry</i> , 2020, 59, 4090-4095.	4.0	23
39	Crystal chemistry and phase equilibria of the CaO–½Ho ₂ O ₃ –CoO ₂ system at 885°C in air. <i>Solid State Sciences</i> , 2020, 107, 106348.	3.2	1
40	High-Pressure, High-Temperature Synthesis and Characterization of Polar and Magnetic LuCrWO ₆ . <i>Inorganic Chemistry</i> , 2020, 59, 3579-3584.	4.0	9
41	Enhancing easy-plane anisotropy in bespoke Ni(II) quantum magnets. <i>Polyhedron</i> , 2020, 180, 114379.	2.2	10
42	From Waste-Heat Recovery to Refrigeration: Compositional Tuning of Magnetocaloric Mn _{1+x} Sb. <i>Chemistry of Materials</i> , 2020, 32, 1243-1249.	6.7	18
43	Long-range and local crystal structures of the $Sr_{1-x}Ca_xMnO_{3-\delta}$. <i>Chemistry of Materials</i> , 2020, 32, 1243-1249.	2.4	9
44	Evolution of noncollinear magnetism in magnetocaloric MnPtGa. <i>Physical Review Materials</i> , 2020, 4, .	2.4	9
45	The (Current) Acridine Solid Form Landscape: Eight Polymorphs and a Hydrate. <i>Crystal Growth and Design</i> , 2019, 19, 4884-4893.	3.0	16
46	Using Mixed Salt Electrolytes to Stabilize Silicon Anodes for Lithium-Ion Batteries via in Situ Formation of Li ⁺ M ⁺ Si Ternaries (M = Mg, Zn, Al, Ca). <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29780-29790.	8.0	60
47	High-Pressure Synthesis and Ferrimagnetism of Ni ₃ TeO ₆ -Type Mn ₂ ScMO ₆ (M = Nb, Ta). <i>Inorganic Chemistry</i> , 2019, 58, 15953-15961.	4.0	6
48	MnFe _{0.5} Ru _{0.5} O ₃ : an above-room-temperature antiferromagnetic semiconductor. <i>Journal of Materials Chemistry C</i> , 2019, 7, 509-522.	5.5	5
49	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. <i>ACS Energy Letters</i> , 2019, 4, 1528-1534.	17.4	75
50	Long-Range Antiferromagnetic Order in a Rocksalt High Entropy Oxide. <i>Chemistry of Materials</i> , 2019, 31, 3705-3711.	6.7	112
51	Molecular Packing and Singlet Fission: The Parent and Three Fluorinated 1,3-Diphenylisobenzofurans. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1947-1953.	4.6	25
52	First-principles study of carbon capture and storage properties of porous MnO ₂ octahedral molecular sieve OMS-5. <i>Powder Diffraction</i> , 2019, 34, 13-20.	0.2	3
53	Mn ₂ CoReO ₆ : a robust multisublattice antiferromagnetic perovskite with small A-site cations. <i>Chemical Communications</i> , 2019, 55, 3331-3334.	4.1	15
54	Tetragonal Cs _{1.17} In _{0.81} Cl ₃ : A Charge-Ordered Indium Halide Perovskite Derivative. <i>Chemistry of Materials</i> , 2019, 31, 1981-1989.	6.7	20

#	ARTICLE	IF	CITATIONS
55	High-Pressure Synthesis of Lu ₂ Ni ₆ O ₆ with Ferrimagnetism and Large Coercivity. <i>Inorganic Chemistry</i> , 2019, 58, 397-404.	4.0	28
56	Anomalous Stoichiometry, 3-D Bridged Triangular/Pentagonal Layered Structured Artificial Antiferromagnet for the Prussian Blue Analogue A ₃ Mn ^{II} Cl ₅ (CN) ₁₃ (A = NMe ₄ ,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 697 911-921.	3.3	7
57	Anomalous Stoichiometry and Antiferromagnetic Ordering for the Extended Hydroxymanganese(II) Cubes/Hexacyanometalate-Based 3D Structured [Mn ^{II} Cl ₄ (OH) ₄][Mn ^{II} (CN) ₆ (OH) ₂] ₃ ·xH ₂ O. <i>Chemistry - A European Journal</i> , 2019, 25, 1782-1787.	3.3	7
58	Tunable multiferric order parameters in $Sr_{1-x}Mn_xFe_2O_{7-x}$. <i>Chemistry - A European Journal</i> , 2019, 25, 1782-1787.	2.4	5
59	Acridine form IX. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2019, 75, 489-491.	0.5	3
60	Crystal chemistry, phase diagrams and thermoelectric properties of the CaMCoO (M = Ca, Sr, Ba). <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2019, 75, a198-a198.	0.1	0
61	Multivalent Electrochemistry of Spinel Mg _x Mn ₃ O ₄ Nanocrystals. <i>Chemistry of Materials</i> , 2018, 30, 1496-1504.	6.7	23
62	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca ²⁺ or Zn ²⁺ . <i>Journal of Physical Chemistry C</i> , 2018, 122, 4182-4188.	3.1	33
63	Identifying the chemical and structural irreversibility in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ a model compound for classical layered intercalation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4189-4198.	10.3	48
64	Structure and Phase Transformation in the Giant Magnetostriction Laves-Phase SmFe ₂ . <i>Inorganic Chemistry</i> , 2018, 57, 689-694.	4.0	23
65	YCrWO ₆ : Polar and Magnetic Oxide with CaTa ₂ O ₆ -Related Structure. <i>Chemistry of Materials</i> , 2018, 30, 1045-1054.	6.7	22
66	Tunable Thermal Expansion from Negative, Zero, to Positive in Cubic Prussian Blue Analogues of GaFe(CN) ₆ . <i>Inorganic Chemistry</i> , 2018, 57, 14027-14030.	4.0	28
67	Low-Frequency Phonon Driven Negative Thermal Expansion in Cubic GaFe(CN) ₆ Prussian Blue Analogues. <i>Inorganic Chemistry</i> , 2018, 57, 10918-10924.	4.0	32
68	Thermoelectric Properties of CoAsSb: An Experimental and Theoretical Study. <i>Chemistry of Materials</i> , 2018, 30, 4207-4215.	6.7	5
69	In situ and operando structural analysis with high-energy X-rays at the Advanced Photon Source APS. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a378-a378.	0.1	0
70	Sensitivity and Limitations of Structures from X-ray and Neutron-Based Diffraction Analyses of Transition Metal Oxide Lithium-Battery Electrodes. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1802-A1811.	2.9	40
71	Competing Structural Instabilities in the Ruddlesden-Popper Derivatives HRTiO ₄ (R = Rare) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 697 911-921.	6.7	22
72	Composition, Response to Pressure, and Negative Thermal Expansion in M ^{II} B ^{IV} F ₆ (M = Ca, Mg; B = Zr, Nb). <i>Chemistry of Materials</i> , 2017, 29, 823-831.	6.7	36

#	ARTICLE	IF	CITATIONS
73	From Coating to Dopant: How the Transition Metal Composition Affects Alumina Coatings on Ni-Rich Cathodes. ACS Applied Materials & Interfaces, 2017, 9, 41291-41302.	8.0	102
74	Combining microscopic and macroscopic probes to untangle the single-ion anisotropy and exchange energies in an S^2 quantum antiferromagnet. Physical Review B, 2017, 95, .	3.2	15
75	The solidification products of levitated Fe ₈₃ B ₁₇ studied by high-energy x-ray diffraction. Journal of Applied Physics, 2016, 120, 175104.	2.5	3
76	Structure and Magnetic Behavior of Layered Honeycomb Tellurates, BiM(III)TeO ₆ (M = Cr, Tj ETQq0 0 0 rgBT /Overlock 10	4.0	18
77	Ba ₃ (Cr _{0.97} (1)Te _{0.03} (1)) ₂ TeO ₉ : in Search of Jahn-Teller Distorted Cr(II) Oxide. Inorganic Chemistry, 2016, 55, 10135-10142.	4.0	8
78	Bimetallic MOFs (H ₃ O) _x [Cu(MF ₆)(pyrazine) ₂] ₄ disordered quantum spins in the V ⁴⁺ system. Chemical Communications, 2016, 52, 12653-12656.	4.1	6
79	Control of the third dimension in copper-based square-lattice antiferromagnets. Physical Review B, 2016, 93, .	3.2	18
80	Double-Q spin-density wave in iron arsenide superconductors. Nature Physics, 2016, 12, 493-498.	16.7	101
81	Antiferromagnetism in a Family of $\text{S} = 1$ Square Lattice Coordination Polymers NiX ₂ (pyz) ₂ (X = Cl, Br, I, NCS; pyz = Pyrazine). Inorganic Chemistry, 2016, 55, 3515-3529.	4.0	23
82	Molecular docking sites designed for the generation of highly crystalline covalent organic frameworks. Nature Chemistry, 2016, 8, 310-316.	13.6	436
83	Thermodynamics, Kinetics and Structural Evolution of μ -LiVOPO ₄ over Multiple Lithium Intercalation. Chemistry of Materials, 2016, 28, 1794-1805.	6.7	64
84	In search of the elusive IrB ₂ : Can mechanochemistry help?. Journal of Solid State Chemistry, 2016, 233, 108-119.	2.9	7
85	Dirac metal to topological metal transition at a structural phase change in PbAu_2S_2 and prediction of topology. Physical Review B, 2016, 93, 114407.	3.2	55
86	Symmetry and light stuffing of H_2O in Ti_2O_3 . Physical Review B, 2016, 93, 114407.	3.2	31
87	Applications of principal component analysis to pair distribution function data. Journal of Applied Crystallography, 2015, 48, 1619-1626.	4.5	47
88	Site Dependency of the High Conductivity of Ga ₂ In ₆ Sn ₂ O ₁₆ : The Role of the 7-Coordinate Site. Chemistry of Materials, 2015, 27, 8084-8093.	6.7	4
89	Rechargeable Ca-Ion Batteries: A New Energy Storage System. Chemistry of Materials, 2015, 27, 8442-8447.	6.7	271
90	Extreme Confinement of Xenon by Cryptophane in the Solid State. Angewandte Chemie - International Edition, 2015, 54, 1471-1475.	13.8	43

#	ARTICLE	IF	CITATIONS
109	Influence of HF ₂ ⁻ geometry on magnetic interactions elucidated from polymorphs of the metal-organic framework [Ni(HF ₂)(pyz) ₂]PF ₆ (pyz = pyrazine). Dalton Transactions, 2012, 41, 7235.	3.3	16
110	Tricyanoquinomethanimine (TCQMI) Based Organic Magnetic Materials. Advanced Functional Materials, 2012, 22, 1802-1811.	14.9	6
111	Structure and magnetic ordering of a 2-D MnII(TCNE)I(OH ₂) (TCNE = tetracyanoethylene) organic-based magnet (T _c = 171 K). Chemical Communications, 2011, 47, 7602.	4.1	26
112	Spectroscopic study of (two-dimensional) molecule-based magnets: [MII(TCNE)(NCMe) ₂][SbF ₆] (M = Fe,)	3.0	9
113	Structural, Electronic, and Magnetic Properties of Quasi-1D Quantum Magnets [Ni(HF ₂)(pyz) ₂]X (pyz = pyrazine; X = PF ₆ ⁻)	4.0	30
114	A Tale of Two Polymorphic Pharmaceuticals: Pyrithydione and Propyphenazone and their 1937 Co-crystal Patent. Chemistry - A European Journal, 2011, 17, 13445-13460.	3.3	21
115	A Comparison of Cocrystal Structure Solutions from Powder and Single Crystal Techniques. Crystal Growth and Design, 2010, 10, 4630-4637.	3.0	31
116	Third structure determination by powder diffractometry round robin (SDPDRR-3). Powder Diffraction, 2009, 24, 254-262.	0.2	31
117	Implementation and use of robust refinement in powder diffraction in the presence of impurities. Journal of Applied Crystallography, 2009, 42, 385-391.	4.5	37