Alexandra Navrotsky

List of Publications by Year in Descending Order

607 papers	24,189 citations	71 h-index	129 g-index
633 ext. papers	26,620 ext. citations	5.4 avg, IF	7.36 L-index

#	Paper	IF	Citations
607	Thermochemistry of stoichiometric rare earth oxyfluorides REOF. *Journal of the American Ceramic Society*, **2022**, 105, 1472	3.8	0
606	Heat capacity and thermodynamic functions of partially dehydrated cation-exchanged (Na+, Cs+, Cd2+, Li+, and NH4+) RHO zeolites. *Journal of Chemical Thermodynamics*, **2022**, 164, 106620	2.9	2
605	The Low-Temperature Heat Capacity and Thermodynamic Properties of Greigite (Fe3S4). *Journal of Chemical Thermodynamics*, **2022**, 106836	2.9	0
604	Development of high-temperature oxide melt solution calorimetry for p-block element containing materials CORRIGENDUM **2021**, 36, 785		4
603	Cooperative formation of porous silica and peptides on the prebiotic Earth. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
602	Pressure-induced structural changes cause large enhancement of photoluminescence in halide perovskites: a quantitative relationship. *National Science Review*, **2021**, 8, nwab041	10.8	2
601	Energetics of the Local Environment of Structure-Directing Agents Influence Zeolite Synthesis. *Chemistry of Materials*, **2021**, 33, 2126-2138	9.6	6
600	Energetic Stability and Its Role in the Mechanism of Ionic Transport in NASICON-Type Solid-State Electrolyte LiAlTi(PO). *Journal of Physical Chemistry Letters*, **2021**, 12, 4400-4406	6.4	3
599	Shear Pleasure: The Structure, Formation, and Thermodynamics of Crystallographic Shear Phases. *Annual Review of Materials Research*, **2021**, 51, 521-540	12.8	5
598	Chapmanite [Fe₂Sb(Si₂O₅)O₃(OH)]: thermodynamic properties and formation in low-temperature environments. *European Journal of Mineralogy*, **2021**, 33, 357-371	2.2	0
597	Characterization of structural changes in modern and archaeological burnt bone: Implications for differential preservation bias. *PLoS ONE*, **2021**, 16, e0254529	3.7	4
596	Structure and Thermodynamics of Silicon Oxycarbide Polymer-Derived Ceramics with and without Mixed-Bonding. *Materials*, **2021**, 14,	3.5	1
595	Thermodynamics of cesium lead halide (CsPbX3, x= I, Br, Cl) perovskites. *Thermochimica Acta*, **2021**, 695, 178813	2.9	8
594	Thermodynamics of high entropy oxides. *Acta Materialia*, **2021**, 202, 1-21	8.4	42
593	Thermochemistry and phase stability of the polymorphs of yttrium tantalate, YTaO4. *Journal of the European Ceramic Society*, **2021**, 41, 1629-1638	6	6
592	Effects of Al:Si and (Al+Na):Si ratios on the properties of the international simple glass, part I: Physical properties. *Journal of the American Ceramic Society*, **2021**, 104, 167-182	3.8	5
591	Recovery of Rare Earth Elements from Recycled Hard Disk Drive Mixed Steel and Magnet Scrap. *Minerals, Metals and Materials Series*, **2021**, 139-154	0.3	4

590	Thermodynamics of Fluorite-Structured Oxides Relevant to Nuclear Energy: A Review. *ACS Earth and Space Chemistry*, **2021**, 5, 703-721	3.2	1
589	Insight on the Stability of Thick Layers in 2D Ruddlesden-Popper and Dion-Jacobson Lead Iodide Perovskites. *Journal of the American Chemical Society*, **2021**, 143, 2523-2536	16.4	31
588	Development of high-temperature oxide melt solution calorimetry for p-block element containing materials □CORRIGENDUM. *Journal of Materials Research*, **2021**, 36, 785-785	2.5	3
587	Marinite Li2Ni(SO4)2 as a New Member of the Bisulfate Family of High-Voltage Lithium Battery Cathodes. *Chemistry of Materials*, **2021**, 33, 6108-6119	9.6	2
586	Heat capacities and thermodynamic functions of neodymia and samaria doped ceria. *Journal of Chemical Thermodynamics*, **2021**, 158, 106454	2.9	
585	Effect of Annealing on Structural and Thermodynamic Properties of ThSiO-ErPO Xenotime Solid Solution. *Inorganic Chemistry*, **2021**, 60, 12020-12028	5.1	1
584	Structure-property and thermodynamic relationships in rare earth (Y, Eu, Pr) iridate pyrochlores. *Journal of Solid State Chemistry*, **2021**, 299, 122163	3.3	3
583	Materials of the Universe: The Final Chemical Frontier. *ACS Earth and Space Chemistry*, **2021**, 5, 1812-1813	3.2	0
582	Radiation Effects in the Crystalline-Amorphous SiOC Polymer-Derived Ceramics: Insights from Experiments and Molecular Dynamics Simulation. *ACS Applied Materials & Interfaces*, **2021**, 13, 40106-40117	8.5	2
581	A Comparison of Order-Disorder in Several Families of Cubic Oxides. *Frontiers in Chemistry*, **2021**, 9, 719169	5.6	0
580	Heat capacity and thermodynamic functions of transition metal ion (Cu2+, Fe2+, Mn2+) exchanged, partially dehydrated zeolite A (LTA). *Journal of Chemical Thermodynamics*, **2021**, 161, 106556	2.9	2
579	A new class of entropy stabilized oxides: Commensurately modulated A6B2O17 (A□Zr, Hf; B□Nb, Ta) structures. *Scripta Materialia*, **2021**, 204, 114139	5.6	2
578	Thermochemistry of sodium rare earth ternary fluorides, NaREF4. *Acta Materialia*, **2021**, 220, 117289	8.4	2
577	Synthesis and thermodynamics of uranium-incorporated □-Fe2O3 nanoparticles. *Journal of Nuclear Materials*, **2021**, 556, 153172	3.3	3
576	Thermochemical Investigation of the Stability and Conversion of Nanocrystalline and High-Temperature Phases in Sodium Neodymium Fluorides. *Chemistry of Materials*, **2021**, 33, 9571-9579	9.6	0
575	Linker Substituents Control the Thermodynamic Stability in Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2020**, 142, 21720-21729	16.4	12
574	Greigite (FeS) is thermodynamically stable: Implications for its terrestrial and planetary occurrence. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 28645-28648	11.5	1
573	Systematic Water Uptake Energetics of Yttrium-Doped Barium Zirconate□A High Resolution Thermochemical Study. *Journal of Physical Chemistry C*, **2020**, 124, 11308-11316	3.8	5

572	Melting temperature measurement of refractory oxide ceramics as a function of oxygen fugacity using containerless methods. *Journal of the American Ceramic Society*, **2020**, 103, 4867-4875	3.8	0
571	Thermodynamics Drives the Stability of the MOF-74 Family in Water. *ACS Omega*, **2020**, 5, 13158-13163	3.9	10
570	Entropy Stabilization of TiO2Nb2O5 WadsleyRoth Shear Phases and Their Prospects for Lithium-Ion Battery Anode Materials. *Chemistry of Materials*, **2020**, 32, 5301-5308	9.6	24
569	Molecular Recognition at Mineral Interfaces: Implications for the Beneficiation of Rare Earth Ores. *ACS Applied Materials & Interfaces*, **2020**, 12, 16327-16341	9.5	11
568	Thermodynamic assessment of BaOIn2O3 (Ln=La, Pr, Eu, Gd, Er) systems. *Journal of the American Ceramic Society*, **2020**, 103, 3896-3904	3.8	2
567	Energetics of CO and HO adsorption on alkaline earth metal doped TiO. *Physical Chemistry Chemical Physics*, **2020**, 22, 15600-15607	3.6	8
566	Thermochemistry of cation disordered Li ion battery cathode materials, (M' = Nb and Ta, M'' = Mn and Fe).. *RSC Advances*, **2020**, 10, 6540-6546	3.7	2
565	Thermodynamic Evidence of Structural Transformations in CO-Loaded Metal-Organic Framework Zn(MeIm) from Heat Capacity Measurements. *Journal of the American Chemical Society*, **2020**, 142, 4833-4841	16.4	16
564	Steam-Induced Coarsening of Single-Unit-Cell MFI Zeolite Nanosheets and Its Effect on External Surface Brsted Acid Catalysis. *Angewandte Chemie*, **2020**, 132, 9666-9672	3.6	2
563	Steam-Induced Coarsening of Single-Unit-Cell MFI Zeolite Nanosheets and Its Effect on External Surface Brsted Acid Catalysis. *Angewandte Chemie - International Edition*, **2020**, 59, 9579-9585	16.4	15
562	Quantifying oxygen vacancies in neodymium and samarium doped ceria from heat capacity measurements. *Acta Materialia*, **2020**, 188, 740-744	8.4	4
561	Thermochemistry of nitrogen-doped reduced graphene oxides. *Journal of the European Ceramic Society*, **2020**, 40, 6322-6327	6	3
560	A Geologic Si-O-C Pathway to Incorporate Carbon in Silicates. *Geophysical Monograph Series*, **2020**, 47-54	1.1	
559	In Situ High-Temperature Synchrotron Diffraction Studies of (Fe,Cr,Al)O Spinels. *Inorganic Chemistry*, **2020**, 59, 5949-5957	5.1	3
558	Hydration structure and water exchange kinetics at xenotime-water interfaces: implications for rare earth minerals separation. *Physical Chemistry Chemical Physics*, **2020**, 22, 7719-7727	3.6	4
557	Energetics of Salt-Bearing Sodalites, Na8Al6Si6O24X2 (X = SO4, ReO4, Cl, I): A Treatment Option for Pertechnetate-Enriched Nuclear Waste Streams. *ACS Earth and Space Chemistry*, **2020**, 4, 2153-2161	3.2	4
556	Formation and energetics of amorphous rare earth (RE) carbonates in the RE2O3CO2H2O system. *Thermochimica Acta*, **2020**, 692, 178753	2.9	2
555	The thermodynamics of gas absorption and guest-induced flexibility in zeolite Y. *Microporous and Mesoporous Materials*, **2020**, 294, 109893	5.3	7

554	Synthesis, Characterization, and Enthalpies of Formation of Uranium Substituted Zirconolites. *ACS Earth and Space Chemistry*, **2020**, 4, 1878-1887	3.2	2
553	Disorder in HoTi Zr O: pyrochlore to defect fluorite solid solution series.. *RSC Advances*, **2020**, 10, 34632-34650	3.7	17
552	Conductivity, structure, and thermodynamics of YTiO-YNbO solid solutions. *Dalton Transactions*, **2020**, 49, 10839-10850	4.3	3
551	Thermal Analysis of High-Entropy Rare Earth Oxides. *Materials*, **2020**, 13,	3.5	6
550	Thermochemical Insights into Stability and Hydration of Ion-Exchanged Zeolite ZK-5 (KFI Framework). *Journal of Physical Chemistry C*, **2020**, 124, 26193-26202	3.8	2
549	Enthalpies of formation of high entropy and multicomponent alloys using oxide melt solution calorimetry. *Intermetallics*, **2020**, 125, 106897	3.5	5
548	A Synergistic Approach to Unraveling the Thermodynamic Stability of Binary and Ternary Chevrel Phase Sulfides. *Chemistry of Materials*, **2020**, 32, 7044-7051	9.6	5
547	Experimental and computational studies of melting of the spinel phase in the Fe-Al-O ternary system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2020**, 70, 101798	1.9	0
546	Thermochemistry of the ZrO2-SrO System: From enthalpies of formation and heat capacities of the compounds to the phase diagram. *Journal of the American Ceramic Society*, **2020**, 103, 1425-1435	3.8	
545	Thermochemistry of rare earth oxyhydroxides, REOOH (RE = Eu to Lu). *Journal of Solid State Chemistry*, **2020**, 287, 121344	3.3	3
544	Energetic insights into the crystallization of lanthanum carbonate amorphous precursors. *Thermochimica Acta*, **2020**, 688, 178605	2.9	3
543	Thermodynamic Studies of Bromide Incorporation into Cesium Lead Iodide (CsPbI3). *Journal of Physical Chemistry C*, **2020**, 124, 8639-8642	3.8	5
542	Carbides and Nitrides of Zirconium and Hafnium. *Materials*, **2019**, 12,	3.5	25
541	Mechanical and structural properties of radiation-damaged allanite-(Ce) and the effects of thermal annealing. *Physics and Chemistry of Minerals*, **2019**, 46, 921-933	1.6	5
540	Energetics, Structures, and Phase Transitions of Cubic and Orthorhombic Cesium Lead Iodide (CsPbI) Polymorphs. *Journal of the American Chemical Society*, **2019**, 141, 14501-14504	16.4	52
539	Thermodynamic and structural evolution of mechanically milled and swift heavy ion irradiated Er2Ti2O7 pyrochlore. *Acta Materialia*, **2019**, 181, 309-317	8.4	10
538	The structure and thermochemistry of K2CO3-MgCO3 glass. *Journal of Materials Research*, **2019**, 34, 3377-3388	2.5	1
537	Thermochemical investigation of lithium borate glasses and crystals. *Journal of the American Ceramic Society*, **2019**, 102, 4538-4545	3.8	3

536	TiO2Surface Engineering to Improve Nanostability: The Role of Interface Segregation. *Journal of Physical Chemistry C*, **2019**, 123, 4949-4960	3.8	14
535	Metal-catalyst-free access to multiwalled carbon nanotubes/silica nanocomposites (MWCNT/SiO) from a single-source precursor. *Dalton Transactions*, **2019**, 48, 11018-11033	4.3	9
534	Energetics of hydration on uranium oxide and peroxide surfaces. *Journal of Materials Research*, **2019**, 34, 3319-3325	2.5	7
533	Thermodynamics of ZnxMn3□O4 and Mg1□CuzCr2O4 spinel solid solutions. *Journal of Materials Research*, **2019**, 34, 3305-3311	2.5	4
532	Thermochemistry of Surfactant-Templating of USY Zeolite. *Chemistry - A European Journal*, **2019**, 25, 10045-10048	4.8	4
531	Adsorption mechanism of alkyl hydroxamic acid onto bastnäsite: Fundamental steps toward rational collector design for rare earth elements. *Journal of Colloid and Interface Science*, **2019**, 553, 210-219	9.3	31
530	Enthalpies of formation and phase stability relations of USi, U3Si5 and U3Si2. *Journal of Nuclear Materials*, **2019**, 523, 101-110	3.3	13
529	Polymer-Derived Ultra-High Temperature Ceramics (UHTCs) and Related Materials. *Advanced Engineering Materials*, **2019**, 21, 1900269	3.5	47
528	Energetics of ethanol and carbon dioxide adsorption on anatase, rutile, and □alumina nanoparticles. *American Mineralogist*, **2019**, 104, 686-693	2.9	4
527	Heat capacity and thermodynamic functions of crystalline forms of the metal-organic framework zinc 2-methylimidazolate, Zn(MeIm)2. *Journal of Chemical Thermodynamics*, **2019**, 136, 160-169	2.9	9
526	Sample seal-and-drop device and methodology for high temperature oxide melt solution calorimetric measurements of PuO. *Review of Scientific Instruments*, **2019**, 90, 044101	1.7	10
525	Reply to comments: □n-situ determination of the HfO2-Ta2O5-temperature phase diagram up to 3000°C□*Journal of the American Ceramic Society*, **2019**, 102, 7028-7030	3.8	2
524	Theoretical Prediction and Experimental Evaluation of Topological Landscape and Thermodynamic Stability of a Fluorinated Zeolitic Imidazolate Framework. *Chemistry of Materials*, **2019**, 31, 3777-3783	9.6	22
523	Mechanochemical Synthesis, Accelerated Aging, and Thermodynamic Stability of the Organic Mineral Paceite and Its Cadmium Analogue. *ACS Omega*, **2019**, 4, 5486-5495	3.9	11
522	Thermodynamic stability of the fluorite phase in the CeO2 □CaO □ZrO2 system. *Journal of Nuclear Materials*, **2019**, 517, 80-85	3.3	4
521	Functionality in metal-organic framework minerals: proton conductivity, stability and potential for polymorphism. *Chemical Science*, **2019**, 10, 4923-4929	9.4	24
520	Review of surface water interactions with metal oxide nanoparticles. *Journal of Materials Research*, **2019**, 34, 416-427	2.5	14
519	Calorimetric study of the thermodynamic properties of Mn5O8. *Journal of the American Ceramic Society*, **2019**, 102, 1394-1401	3.8	2

518	Heat capacities, entropies, and Gibbs free energies of formation of low-k amorphous Si(O)CH dielectric films and implications for stability during processing. *Journal of Chemical Thermodynamics*, **2019**, 128, 320-335	2.9	4
517	Neutron Spectroscopic and Thermochemical Characterization of Lithium–Aluminum-Layered Double Hydroxide Chloride: Implications for Lithium Recovery. *Journal of Physical Chemistry C*, **2019**, 123, 20723-20729	3.8	8
516	Enthalpies of formation of the solid solutions of ZrxY0.5−x/2Ta0.5−x/2O2 (0 ≤ x ≤ 0.2 and 0.65 ≤ x ≤ 1). *Journal of Materials Research*, **2019**, 34, 3343-3350	2.5	2
515	Energetics of porous amorphous low-k SiOCH dielectric films. *Journal of Chemical Thermodynamics*, **2019**, 139, 105885	2.9	2
514	New Developments in the Calorimetry of High-Temperature Materials. *Engineering*, **2019**, 5, 366-371	9.7	4
513	Thermodynamics of BaNd2O4 and phase diagram of the BaO–Nd2O3 system. *Journal of Materials Research*, **2019**, 34, 3337-3342	2.5	2
512	Towards a nanoparticle-based prophylactic for maternal autoantibody-related autism. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2019**, 21, 102067	6	2
511	Synthesis, Crystal Structure, and Enthalpies of Formation of Churchite-type REPO4·2H2O (RE = Gd to Lu) Materials. *Crystal Growth and Design*, **2019**, 19, 4641-4649	3.5	8
510	Synthesis and thermodynamics of transition metal oxide based sodium ion cathode materials. *Journal of Solid State Chemistry*, **2019**, 280, 121011	3.3	1
509	Compositional control of radionuclide retention in hollandite-based ceramic waste forms for Cs-immobilization. *Journal of the American Ceramic Society*, **2019**, 102, 4314-4324	3.8	10
508	Energetics of Formation and Disordering in Rare Earth Weberite RETaO Materials. *Inorganic Chemistry*, **2019**, 58, 16126-16133	5.1	8
507	Avalanches during recrystallization in radiation-damaged pyrochlore and allanite: Statistical similarity to phase transitions in functional materials. *Applied Physics Letters*, **2019**, 115, 231904	3.4	3
506	Compositional control of tunnel features in hollandite-based ceramics: structure and stability of (Ba,Cs)1.33(Zn,Ti)8O16. *Journal of Materials Science*, **2019**, 54, 1112-1125	4.3	22
505	In-situ determination of the HfO2–Ta2O5-temperature phase diagram up to 3000 °C. *Journal of the American Ceramic Society*, **2019**, 102, 4848-4861	3.8	25
504	Structural and thermodynamic limits of layer thickness in 2D halide perovskites. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 58-66	11.5	152
503	Bio- and mineral acid leaching of rare earth elements from synthetic phosphogypsum. *Journal of Chemical Thermodynamics*, **2019**, 132, 491-496	2.9	23
502	Energetics of melting of Yb2O3 and Lu2O3 from drop and catch calorimetry and first principles computations. *Journal of Chemical Thermodynamics*, **2019**, 132, 405-410	2.9	5
501	Rare earth sulfates in aqueous systems: Thermodynamic modeling of binary and multicomponent systems over wide concentration and temperature ranges. *Journal of Chemical Thermodynamics*, **2019**, 131, 49-79	2.9	23

500	Lithium aluminum-layered double hydroxide chlorides (LDH): Formation enthalpies and energetics for lithium ion capture. *Journal of the American Ceramic Society*, **2019**, 102, 2398-2404	3.8	13
499	Thermodynamics of reaction between gas-turbine ceramic coatings and ingested CMAS corrodents. *Journal of the American Ceramic Society*, **2019**, 102, 2948-2964	3.8	22
498	Thermochemistry of formation of ion exchanged zeolite RHO. *Microporous and Mesoporous Materials*, **2019**, 274, 373-378	5.3	7
497	Thermodynamics of amorphous SiN(O)H dielectric films synthesized by plasma-enhanced chemical vapor deposition. *Journal of the American Ceramic Society*, **2018**, 101, 2017-2027	3.8	3
496	Nanocrystalline apatites: The fundamental role of water. *American Mineralogist*, **2018**, 103, 550-564	2.9	25
495	Energetics of bulk lutetium-doped Ce1□LuxO2□/2 compounds. *Journal of the American Ceramic Society*, **2018**, 101, 3520-3526	3.8	1
494	Thermodynamic and structural evolution of Dy2Ti2O7 pyrochlore after swift heavy ion irradiation. *Acta Materialia*, **2018**, 145, 227-234	8.4	24
493	Thermodynamic evidence of flexibility in HO and CO absorption of transition metal ion exchanged zeolite LTA. *Physical Chemistry Chemical Physics*, **2018**, 20, 3970-3978	3.6	12
492	Experimental heat capacities, excess entropies, and magnetic properties of bulk and nano Fe3O4-Co3O4 and Fe3O4-Mn3O4 spinel solid solutions. *Journal of Solid State Chemistry*, **2018**, 259, 79-90	3.3	3
491	Heat capacity and thermodynamic functions of crystalline and amorphous forms of the metal organic framework zinc 2-ethylimidazolate, Zn(EtIm)2. *Journal of Chemical Thermodynamics*, **2018**, 116, 341-351	2.9	15
490	Experimental thermochemistry of neptunium oxides: Np2O5 and NpO2. *Journal of Nuclear Materials*, **2018**, 501, 398-403	3.3	8
489	Combined experimental and computational investigation of thermodynamics and phase equilibria in the CaO□TiO2 system. *Journal of the American Ceramic Society*, **2018**, 101, 1361-1370	3.8	10
488	Size driven thermodynamic crossovers in phase stability in zirconia and hafnia. *Journal of the American Ceramic Society*, **2018**, 101, 31-35	3.8	19
487	Thermodynamics of radiation induced amorphization and thermal annealing of Dy2Sn2O7 pyrochlore. *Acta Materialia*, **2018**, 155, 386-392	8.4	11
486	Probing disorder in pyrochlore oxides using in situ synchrotron diffraction from levitated solids-A thermodynamic perspective. *Scientific Reports*, **2018**, 8, 10658	4.9	24
485	Trends in Structure and Thermodynamic Properties of Normal Rare Earth Carbonates and Rare Earth Hydroxycarbonates. *Minerals (Basel, Switzerland)*, **2018**, 8, 106	2.4	38
484	Hydration dynamics in zeolite A □An X-ray diffraction and infrared spectroscopic study. *Microporous and Mesoporous Materials*, **2018**, 268, 197-201	5.3	10
483	Thermodynamics of H2O and CO2 Absorption and Guest-Induced Phase Transitions in Zeolite RHO. *Journal of Physical Chemistry C*, **2018**, 122, 20366-20376	3.8	10

482	Thermochemistry of BaSm2O4 and thermodynamic assessment of the BaO–Sm2O3 system. *Journal of the American Ceramic Society*, **2018**, 101, 5827-5835	3.8	6
481	Energetics of defect production in fluorite-structured CeO2 induced by highly ionizing radiation. *Physical Review Materials*, **2018**, 2,	3.2	10
480	Surface energy of fayalite and its effect on Fe-Si-O oxygen buffers and the olivine-spinel transition. *American Mineralogist*, **2018**, 103, 1599-1603	2.9	2
479	Thermochemistry of the simplest metal organic frameworks: Formates [M(HCOO)2]·xH2O (M = Li, Mg, Mn, Co, Ni, and Zn). *Journal of Chemical Thermodynamics*, **2018**, 118, 325-330	2.9	3
478	Phase transformations in oxides above 2000°C: experimental technique development. *Advances in Applied Ceramics*, **2018**, 117, s82-s89	2.3	8
477	High-Resolution Thermochemical Study of Phase Stability and Rapid Oxygen Incorporation in YBaCoZn O 114-Cobaltites. *Journal of Physical Chemistry A*, **2018**, 122, 9597-9604	2.8	2
476	Thermodynamics and Stability of Rhabdophanes, Hydrated Rare Earth Phosphates REPO ·n HO. *Frontiers in Chemistry*, **2018**, 6, 604	5	17
475	Thermochemical Measurements of Alkali Cation Association to Hexatantalate. *Molecules*, **2018**, 23,	4.8	1
474	Combined computational and experimental investigation of high temperature thermodynamics and structure of cubic ZrO and HfO. *Scientific Reports*, **2018**, 8, 14962	4.9	14
473	Tailoring Mesoporous Al2O3 Properties by Transition Metal Doping: A Combined Experimental and Computational Study. *Chemistry of Materials*, **2017**, 29, 1338-1349	9.6	44
472	Thermodynamics of manganese oxides: Sodium, potassium, and calcium birnessite and cryptomelane. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E1046-E1053	11.5	35
471	A comparative study of surface energies and water adsorption on Ce-bastnäsite, La-bastnäsite, and calcite via density functional theory and water adsorption calorimetry. *Physical Chemistry Chemical Physics*, **2017**, 19, 7820-7832	3.6	22
470	Structure and energetics of SiOC and SiOC-modified carbon-bonded carbon fiber composites. *Journal of the American Ceramic Society*, **2017**, 100, 3693-3702	3.8	16
469	Thermodynamic stability of SFCA (silico-ferrite of calcium and aluminum) and SFCA-I phases. *Journal of the American Ceramic Society*, **2017**, 100, 3646-3651	3.8	8
468	Calorimetric Measurements of Surface Energy of Amorphous HfO2 Nanoparticles Produced by Gas Phase Condensation. *Journal of Physical Chemistry C*, **2017**, 121, 10392-10397	3.8	11
467	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. *Journal of the American Ceramic Society*, **2017**, 100, 1777-1803	3.8	17
466	Thermodynamics of copper-manganese and copper-iron spinel solid solutions. *Journal of the American Ceramic Society*, **2017**, 100, 3684-3692	3.8	5
465	Experimental and Theoretical Evaluation of the Stability of True MOF Polymorphs Explains Their Mechanochemical Interconversions. *Journal of the American Chemical Society*, **2017**, 139, 7952-7957	16.4	65

464	Solid-liquid phase equilibria of Fe-Cr-Al alloys and spinels. *Journal of Nuclear Materials*, **2017**, 492, 128-133	3.3	17
463	Low temperature heat capacity and thermodynamic functions of anion bearing sodalites Na8Al6Si6O24X2 (X = SO4, ReO4, Cl, I). *Journal of Chemical Thermodynamics*, **2017**, 114, 14-24	2.9	7
462	A correlation between formation enthalpy and ionic conductivity in perovskite-structured Li3xLa0.67□TiO3 solid lithium ion conductors. *Journal of Materials Chemistry A*, **2017**, 5, 12951-12957	13	13
461	High-temperature calorimetric study of oxide component dissolution in a CaO□MgO□Al2O3□SiO2 slag at 1450□C. *Journal of the American Ceramic Society*, **2017**, 100, 1172-1177	3.8	9
460	Drop-and-catch (DnC) calorimetry using aerodynamic levitation and laser heating. *Journal of the American Ceramic Society*, **2017**, 100, 754-760	3.8	19
459	Composition dependent order-disorder transition in Nd Zr1□O2□.5 pyrochlores: A combined structural, calorimetric and ab initio modeling study. *Acta Materialia*, **2017**, 125, 166-176	8.4	26
458	Structure and Thermochemistry of Perrhenate Sodalite and Mixed Guest Perrhenate/Pertechnetate Sodalite. *Environmental Science & Technology*, **2017**, 51, 997-1006	10.3	17
457	Structure and thermal expansion of Lu2O3 and Yb2O3 up to the melting points. *Journal of Nuclear Materials*, **2017**, 495, 385-391	3.3	20
456	Tunable Low Density Palladium Nanowire Foams. *Chemistry of Materials*, **2017**, 29, 9814-9818	9.6	25
455	Thermochemistry of UO2 □ThO2 and UO2 □ZrO2 fluorite solid solutions. *Journal of Chemical Thermodynamics*, **2017**, 114, 48-54	2.9	18
454	Calorimetric Study of Alkali Metal Ion (K+, Na+, Li+) Exchange in a Clay-Like MXene. *Journal of Physical Chemistry C*, **2017**, 121, 15145-15153	3.8	26
453	Structural, vibrational, and thermochemical properties of the monazite-type solid solution La1□PrxPO4. *Journal of Solid State Chemistry*, **2017**, 245, 82-88	3.3	23
452	A combined experimental and theoretical study of enthalpy of phase transition and fusion of yttria above 2000 □C using □drop-n-catch□calorimetry and first-principles calculation. *Acta Materialia*, **2017**, 124, 204-209	8.4	8
451	Thermal annealing of natural, radiation-damaged pyrochlore. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2017**, 232, 25-38	1	11
450	Formation and Dehydration Enthalpy of Potassium Hexaniobate. *Journal of the American Ceramic Society*, **2017**, 100, 304-311	3.8	2
449	Thermochemistry of La1□LnxPO4-monazites (Ln= Gd, Eu). *Journal of Chemical Thermodynamics*, **2017**, 105, 396-403	2.9	31
448	The Structure of Liquid and Amorphous Hafnia. *Materials*, **2017**, 10,	3.5	21
447	Heat capacities, standard entropies and Gibbs energies of Sr-, Rb- and Cs-substituted barium aluminotitanate hollandites. *Journal of Chemical Thermodynamics*, **2016**, 93, 1-7	2.9	17

446	Location and stability of europium in calcium sulfate and its relevance to rare earth recovery from phosphogypsum waste. *American Mineralogist*, **2016**, 101, 1854-1861	2.9	11
445	Calorimetric Determination of Thermodynamic Stability of MAX and MXene Phases. *Journal of Physical Chemistry C*, **2016**, 120, 28131-28137	3.8	28
444	Thermodynamic studies of studtite thermal decomposition pathways via amorphous intermediates UO3, U2O7, and UO4. *Journal of Nuclear Materials*, **2016**, 478, 158-163	3.3	35
443	Energetics of a Uranothorite (Th1−xUxSiO4) Solid Solution. *Chemistry of Materials*, **2016**, 28, 7117-7124	9.6	22
442	Crystal Structures, Surface Stability, and Water Adsorption Energies of La-Bastnäsite via Density Functional Theory and Experimental Studies. *Journal of Physical Chemistry C*, **2016**, 120, 16767-16781	3.8	19
441	Thermochemistry of Rare Earth Perovskites. *MRS Advances*, **2016**, 1, 2695-2700	0.7	3
440	Thermodynamic Stability of Transition-Metal-Substituted LiMn2-x Mx O4 (M=Cr, Fe, Co, and Ni) Spinels. *ChemPhysChem*, **2016**, 17, 1973-8	3.2	8
439	Effect of synthesis atmosphere on the proton conductivity of Y-doped barium zirconate solid electrolytes. *Ceramics International*, **2016**, 42, 13689-13696	5.1	11
438	Thermochemistry of rare earth perovskites Na3xRE0.67−xTiO3 (RE = La, Ce). *American Mineralogist*, **2016**, 101, 1125-1128	2.9	3
437	Little Thermodynamic Penalty for the Synthesis of Ultraporous Metal Organic Frameworks. *ChemPhysChem*, **2016**, 17, 468-70	3.2	13
436	Thermodynamic Stability of Low-k Amorphous SiOCH Dielectric Films. *Journal of the American Ceramic Society*, **2016**, 99, 2752-2759	3.8	23
435	Direct calorimetric verification of thermodynamic instability of lead halide hybrid perovskites. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 7717-21	11.5	256
434	Synthesis and thermodynamic study of transition metal ion (Mn2+, Co2+, Cu2+, and Zn2+) exchanged zeolites A and Y. *Physical Chemistry Chemical Physics*, **2016**, 18, 10116-22	3.6	16
433	U(v) in metal uranates: a combined experimental and theoretical study of MgUO4, CrUO4, and FeUO4. *Dalton Transactions*, **2016**, 45, 4622-32	4.3	28
432	Bioadsorption of Rare Earth Elements through Cell Surface Display of Lanthanide Binding Tags. *Environmental Science & Technology*, **2016**, 50, 2735-42	10.3	77
431	Heat capacities and thermodynamic properties of antimony substituted lanthanum orthoniobates. *Ceramics International*, **2016**, 42, 7054-7059	5.1	10
430	Thermodynamics of solvent interaction with the metal-organic framework MOF-5. *Physical Chemistry Chemical Physics*, **2016**, 18, 1158-62	3.6	26
429	The Nanocrystalline SnO2–TiO2 System—Part I: Structural Features. *Journal of the American Ceramic Society*, **2016**, 99, 631-637	3.8	10

428	Thermodynamics of bastnaesite: A major rare earth ore mineral. *American Mineralogist*, **2016**, 101, 1129-1134	1.9	16
427	The Nanocrystalline SnO2TiO2 System-Part II: Surface Energies and Thermodynamic Stability. *Journal of the American Ceramic Society*, **2016**, 99, 638-644	3.8	11
426	Chemical ordering in substituted fluorite oxides: a computational investigation of HoZrO and REThO (RE=Ho, Y, Gd, Nd, La). *Scientific Reports*, **2016**, 6, 38772	4.9	19
425	Mssbauer Spectral Properties of Yttrium Iron Garnet, Y3Fe5O12, and Its Isovalent and Nonisovalent Yttrium-Substituted Solid Solutions. *Inorganic Chemistry*, **2016**, 55, 3413-8	5.1	7
424	Rare-earth perovskites along the CaTiO3-Na0.5La0.5TiO3 join: Phase transitions, formation enthalpies, and implications for loparite minerals. *American Mineralogist*, **2016**, 101, 2051-2056	2.9	4
423	Thermodynamic Properties of Polymorphs of Fluorosulfate Based Cathode Materials with Exchangeable Potassium Ions. *ChemPhysChem*, **2016**, 17, 3365-3368	3.2	5
422	Structure and thermodynamic stability of UTaO, a U(v)-bearing compound. *Dalton Transactions*, **2016**, 45, 18892-18899	4.3	5
421	Distinctive Interactions of Cesium and Hexaniobate in Water. *ChemistrySelect*, **2016**, 1, 1858-1862	1.8	11
420	Structure and thermodynamics of uranium-containing iron garnets. *Geochimica Et Cosmochimica Acta*, **2016**, 189, 269-281	5.5	25
419	Energetics of Alkali and Alkaline Earth Ion-Exchanged Zeolite A. *Journal of Physical Chemistry C*, **2016**, 120, 15251-15256	3.8	22
418	Synthesis, characterization and thermochemistry of Cs-, Rb- and Sr-substituted barium aluminium titanate hollandites. *Journal of Nuclear Materials*, **2015**, 459, 70-76	3.3	21
417	Thermodynamics of Fe3O4-Co3O4 and Fe3O4-Mn3O4 spinel solid solutions at the bulk and nanoscale. *Physical Chemistry Chemical Physics*, **2015**, 17, 22286-95	3.6	16
416	CRYSTAL GROWTH. Crystallization by particle attachment in synthetic, biogenic, and geologic environments. *Science*, **2015**, 349, aaa6760	33.3	1035
415	Enthalpies of formation of rare earth niobates, RE3NbO7. *American Mineralogist*, **2015**, 100, 1578-1583	2.9	14
414	Thermochemistry of Multiferroic Organic-Inorganic Hybrid Perovskites [(CH3)2NH2][M(HCOO)3] (M = Mn, Co, Ni, and Zn). *Journal of the American Chemical Society*, **2015**, 137, 10351-6	16.4	31
413	Effects of Simulated Rare Earth Recycling Wastewaters on Biological Nitrification. *Environmental Science & Technology*, **2015**, 49, 9460-8	10.3	18
412	Thermodynamics of Methane Adsorption on Copper HKUST-1 at Low Pressure. *Journal of Physical Chemistry Letters*, **2015**, 6, 2439-43	6.4	17
411	Energy Landscape of Water and Ethanol on Silica Surfaces. *Journal of Physical Chemistry C*, **2015**, 119, 15428-15433	3.8	27

410	Thermodynamic stability of lead-free alkali niobate and tantalate perovskites. *Journal of Materials Chemistry C*, **2015**, 3, 7691-7698	7.1	23
409	Thermodynamics of solid phases containing rare earth oxides. *Journal of Chemical Thermodynamics*, **2015**, 88, 126-141	2.9	50
408	Probing the energetics of organic-nanoparticle interactions of ethanol on calcite. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 5314-8	11.5	19
407	Pyrochlore and perovskite potassium tantalate: enthalpies of formation and phase transformation. *Chemistry - A European Journal*, **2015**, 21, 5231-7	4.8	15
406	Hydrogenated Si□□ nanoparticles: Synthesis, structure, and thermodynamic stability. *Journal of Materials Research*, **2015**, 30, 295-303	2.5	13
405	Energetics of order-disorder in layered magnesium aluminum double hydroxides with interlayer carbonate. *Inorganic Chemistry*, **2015**, 54, 3253-9	5.1	12
404	Energetics of sodium-calcium exchanged zeolite A. *Physical Chemistry Chemical Physics*, **2015**, 17, 11198-203	3.6	11
403	Energetics and structural evolution of Na-Ca exchanged zeolite A during heating. *Physical Chemistry Chemical Physics*, **2015**, 17, 9241-7	3.6	11
402	Review. Mineralogy, materials science, energy, and environment: A 2015 perspective. *American Mineralogist*, **2015**, 100, 674-680	2.9	11
401	Formation enthalpies of LaLn?O3 (Ln?=Ho, Er, Tm and Yb) interlanthanide perovskites. *Journal of Solid State Chemistry*, **2015**, 227, 150-154	3.3	19
400	A combined calorimetric and computational study of the energetics of rare earth substituted UO2 systems. *Acta Materialia*, **2015**, 97, 191-198	8.4	10
399	White Si□□ Ceramic: Structure and Thermodynamic Stability. *Journal of the American Ceramic Society*, **2015**, 98, 242-246	3.8	24
398	Structural Behavior of Ba1.24Al2.48Ti5.52O16 Hollandite at High Temperature: An In Situ Neutron Diffraction Study. *Journal of the American Ceramic Society*, **2015**, 98, 255-262	3.8	12
397	In Situ Diffraction from Levitated Solids Under Extreme Conditions□Structure and Thermal Expansion in the Eu2O3–□rO2 System. *Journal of the American Ceramic Society*, **2015**, 98, 1292-1299	3.8	25
396	Energetics of lanthanide cobalt perovskites: LnCoO3□(Ln = La, Nd, Sm, Gd). *Journal of Materials Chemistry A*, **2015**, 3, 19490-19496	13	12
395	Thermochemistry of rare earth doped uranium oxides LnxU1−xO2□0.5x+y (Ln□=□La, Y, Nd). *Journal of Nuclear Materials*, **2015**, 465, 682-691	3.3	13
394	Thermodynamic stability and correlation with synthesis conditions, structure and phase transformations in orthorhombic and monoclinic Li2M(SO4)2 (M = Mn, Fe, Co, Ni) polymorphs. *Journal of Materials Chemistry A*, **2015**, 3, 2601-2608	13	14
393	Energetics and defect clustering trends for trivalent rare earth cations substituted in UO2. *Journal of Nuclear Materials*, **2015**, 457, 252-255	3.3	6

392	Influence of antimony substitution on spontaneous strain and thermodynamic stability of lanthanum orthoniobate. *Ceramics International*, **2015**, 41, 2128-2133	5.1	20
391	Combined computational and experimental investigation of the refractory properties of La2Zr2O7. *Acta Materialia*, **2015**, 84, 275-282	8.4	28
390	Thermodynamics of metal-organic frameworks. *Journal of Solid State Chemistry*, **2015**, 223, 53-58	3.3	38
389	Innentitelbild: Energetic Insight into the Formation of Solids from Aluminum Polyoxocations (Angew. Chem. 32/2015). *Angewandte Chemie*, **2015**, 127, 9260-9260	3.6	
388	Energetic Insight into the Formation of Solids from Aluminum Polyoxocations. *Angewandte Chemie*, **2015**, 127, 9385-9388	3.6	2
387	Structure and Thermal Expansion of YSZ and La2Zr2O7 Above 1500□C from Neutron Diffraction on Levitated Samples. *Journal of the American Ceramic Society*, **2015**, 98, 3381-3388	3.8	21
386	Energetic Insight into the Formation of Solids from Aluminum Polyoxocations. *Angewandte Chemie - International Edition*, **2015**, 54, 9253-6	16.4	8
385	Influence of Ti4+ on the Energetics and Microstructure of SnO2 Nanoparticles. *Ceramic Engineering and Science Proceedings*, **2015**, 145-152	0.1	
384	Thermodynamics of formation of coffinite, USiO4. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 6551-5	11.5	54
383	Direct Experimental Measurement of Water Interaction Energetics in Amorphous Carbonates MCO3 (M = Ca, Mn, and Mg) and Implications for Carbonate Crystal Growth. *Crystal Growth and Design*, **2015**, 15, 70-78	3.5	27
382	Thermodynamic complexity of carbon capture in alkylamine-functionalized metal□organic frameworks. *Journal of Materials Chemistry A*, **2015**, 3, 4248-4254	13	29
381	Thermochemistry of onion-like carbons. *Carbon*, **2014**, 69, 490-494	10.4	15
380	Cerium Substitution in Yttrium Iron Garnet: Valence State, Structure, and Energetics. *Chemistry of Materials*, **2014**, 26, 1133-1143	9.6	40
379	Progress and New Directions in Calorimetry: A 2014 Perspective. *Journal of the American Ceramic Society*, **2014**, 97, 3349-3359	3.8	133
378	Nuclear Materials. Taking the measure of molten uranium oxide. *Science*, **2014**, 346, 916-7	33.3	9
377	Energetics and Structure of Polymer-Derived Si(B)OC Glasses: Effect of the Boron Content and Pyrolysis Temperature. *Journal of the American Ceramic Society*, **2014**, 97, 303-309	3.8	26
376	Energetics of Confinement of n-Hexane in Ca□Na Ion Exchanged Zeolite A. *Journal of Physical Chemistry C*, **2014**, 118, 25590-25596	3.8	16
375	Computational study of the energetics and defect clustering tendencies for Y- and La-doped UO2. *Acta Materialia*, **2014**, 78, 282-289	8.4	16

374	Thermodynamics of thorium substitution in yttrium iron garnet: comparison of experimental and theoretical results. *Journal of Materials Chemistry A*, **2014**, 2, 16945-16954	13	16
373	Enthalpy of formation and thermodynamic insights into yttrium doped BaZrO3. *Journal of Materials Chemistry A*, **2014**, 2, 17840-17847	13	37
372	Possible correlation between enthalpies of formation and redox potentials in LiMSO4OH (M = Co, Fe, Mn), Li-ion polyanionic battery cathode materials. *Journal of Materials Chemistry A*, **2014**, 2, 6887-6894	13	7
371	Thermochemistry of nanodiamond terminated by oxygen containing functional groups. *Carbon*, **2014**, 80, 544-550	10.4	36
370	Defect Chemistry of Singly and Doubly Doped Ceria: Correlation between Ion Transport and Energetics. *Angewandte Chemie*, **2014**, 126, 9671-9675	3.6	5
369	Energy landscape of self-assembled superlattices of PbSe nanocrystals. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 9054-7	11.5	26
368	Defect chemistry of singly and doubly doped ceria: correlation between ion transport and energetics. *Angewandte Chemie - International Edition*, **2014**, 53, 9517-21	16.4	10
367	Energetics of Formation and Hydration of a Porous Metal Organic Nanotube. *Chemistry of Materials* , **2014**, 26, 5105-5112	9.6	15
366	Thermochemistry, Morphology, and Optical Characterization of Germanium Allotropes. *Chemistry of Materials*, **2014**, 26, 3263-3271	9.6	21
365	Energetics of CO2 and H2O adsorption on zinc oxide. *Langmuir*, **2014**, 30, 9091-7	4	39
364	Theoretical study of mixing energetics in homovalent fluorite-structured oxide solid solutions. *Journal of Nuclear Materials*, **2014**, 444, 292-297	3.3	5
363	Experimental energetics of large and extra-large pore zeolites: Pure silica beta polymorph C (BEC) and Ge-containing ITQ-33. *Microporous and Mesoporous Materials*, **2014**, 187, 77-81	5.3	4
362	High-Temperature Materials Chemistry and Thermodynamics **2014**, 17-38		2
361	Energetics of spinels in the Fe-Ti-O system at the nanoscale. *ChemPhysChem*, **2014**, 15, 3655-62	3.2	6
360	The Energy Landscape of Uranyl Peroxide Species. *Chemistry - A European Journal*, **2014**, 20, 3536-3536	4.8	1
359	Presentation of the Dana Medal of the Mineralogical Society of America for 2014 to Patricia Dove. *American Mineralogist*, **2014**, 99, 1188-1188	2.9	
358	The energy landscape of uranyl-peroxide species. *Chemistry - A European Journal*, **2014**, 20, 3646-51	4.8	22
357	Manganese carbonate formation from amorphous and nanocrystalline precursors: Thermodynamics and geochemical relevance. *American Mineralogist*, **2014**, 99, 1063-1070	2.9	10

356	Energetics of metastudtite and implications for nuclear waste alteration. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17737-42	11.5	49
355	Energetics of Silica-Poor Glasses in the Systems MgO□SiO2 and Mg0.5Ca0.5O□SiO2. *Journal of the American Ceramic Society*, **2014**, 97, 451-456	3.8	2
354	Energetics of CO2 Adsorption on Mg□Al Layered Double Hydroxides and Related Mixed Metal Oxides. *Journal of Physical Chemistry C*, **2014**, 118, 29836-29844	3.8	45
353	Energetics of heterometal substitution in □Keggin [MO4Al12(OH)24(OH2)12]6/7/8+ ions. *American Mineralogist*, **2014**, 99, 2337-2343	2.9	7
352	Direct Measurement of Fusion Enthalpy of LaAlO3 and Comparison of Energetics of Melt, Glass, and Amorphous Thin Films. *Journal of the American Ceramic Society*, **2014**, 97, 1589-1594	3.8	10
351	Energetics of lanthanide-doped calcium phosphate apatite. *American Mineralogist*, **2014**, 99, 2320-2327	2.9	10
350	Rapidly reversible redox transformation in nanophase manganese oxides at room temperature triggered by changes in hydration. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6209-14	11.5	22
349	Characterization of Surface Defect Sites on Bulk and Nanophase Anatase and Rutile TiO2 by Low-Temperature Specific Heat. *Journal of Physical Chemistry C*, **2013**, 117, 4544-4550	3.8	17
348	Surface Energetics of Nanoscale LaMnO3+□Perovskite. *Journal of the American Ceramic Society*, **2013**, 96, 3202-3209	3.8	7
347	Thermochemical evidence for strong iodine chemisorption by ZIF-8. *Journal of the American Chemical Society*, **2013**, 135, 16256-9	16.4	163
346	Effect of Precursor on Speciation and Nanostructure of SiBCN Polymer-Derived Ceramics. *Journal of the American Ceramic Society*, **2013**, 96, 1651-1659	3.8	42
345	Polymer-derived SiCN and SiOC ceramics □structure and energetics at the nanoscale. *Journal of Materials Chemistry A*, **2013**, 1, 3826	13	207
344	Small molecule □silica interactions in porous silica structures. *Geochimica Et Cosmochimica Acta*, **2013**, 109, 38-50	5.5	27
343	Thermochemistry of zeolitic imidazolate frameworks of varying porosity. *Journal of the American Chemical Society*, **2013**, 135, 598-601	16.4	97
342	Direct calorimetric measurement of enthalpy of adsorption of carbon dioxide on CD-MOF-2, a green metal-organic framework. *Journal of the American Chemical Society*, **2013**, 135, 6790-3	16.4	120
341	Zirconium Incorporation into CaTiO3 Perovskite Prepared from Xerogels and Implication for the Fate of (Ca,Sr)TiO3 Nuclear Waste Ceramics. *Journal of the American Ceramic Society*, **2013**, 96, 2644-2650	3.8	0
340	Thermodynamic study of alkali and alkaline-earth cation-exchanged natrolites. *Microporous and Mesoporous Materials*, **2013**, 167, 221-227	5.3	10
339	Thermodynamics of Nanoscale Calcium and Strontium Titanate Perovskites. *Journal of the American Ceramic Society*, **2013**, 96, 3670-3676	3.8	18

338	Noble Gas Adsorption in Copper Trimesate, HKUST-1: An Experimental and Computational Study. *Journal of Physical Chemistry C*, **2013**, 117, 20116-20126	3.8	80
337	Amorphous Alumina Nanoparticles: Structure, Surface Energy, and Thermodynamic Phase Stability. *Journal of Physical Chemistry C*, **2013**, 117, 17123-17130	3.8	106
336	Enthalpies of formation of Fe-Ni monosulfide solid solutions. *American Mineralogist*, **2013**, 98, 1508-1515	2.9	4
335	Thermodynamic Control of Phase Composition and Crystallization of Metal-Modified Silicon Oxycarbides. *Journal of the American Ceramic Society*, **2013**, 96, 1899-1903	3.8	39
334	Stabilizing Effect of Mg on the Energetics of the Li(Ni,Co,Al)O2Cathode Material for Lithium Ion Batteries. *Journal of the Electrochemical Society*, **2013**, 160, A302-A305	3.9	32
333	Energetic Effects of Substitution of La□Nd and Si□Ge Oxyapatite-Type Materials. *Journal of the American Ceramic Society*, **2013**, 96, 3915-3919	3.8	7
332	Thermochemistry of Barium Hollandites. *Journal of the American Ceramic Society*, **2013**, 96, 1554-1561	3.8	25
331	Energetic basis of catalytic activity of layered nanophase calcium manganese oxides for water oxidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 8801-6	11.5	86
330	Thermodynamic basis for evolution of apatite in calcified tissues. *American Mineralogist*, **2013**, 98, 2037-2045	2.9	28
329	Experimental Confirmation of Low Surface Energy in LiCoO2 and Implications for Lithium Battery Electrodes. *Angewandte Chemie*, **2013**, 125, 12361-12364	3.6	2
328	Thermodynamics of Nanocrystalline Sn 0.586 Ti 0.414 O 2 Rutile Solid Solution: Comparison with Nanocrystalline SnO 2 and TiO 2 and with Bulk Materials. *Journal of the American Ceramic Society*, **2012**, 95, 2622-2626	3.8	5
327	Formation enthalpies and heat capacities of rear earth titanates: RE2TiO5 (RE=La, Nd and Gd). *Journal of Solid State Chemistry*, **2012**, 187, 70-74	3.3	27
326	Co3O4□Co2ZnO4 spinels: The case for a solid solution. *Journal of Solid State Chemistry*, **2012**, 190, 143-149	3.3	13
325	Mesoporous silica synthesis: Energetics of interaction between framework and structure directing agent. *Microporous and Mesoporous Materials*, **2012**, 149, 119-125	5.3	20
324	Thermodynamic Properties of Uranyl Minerals: Constraints from Calorimetry and Solubility Measurements. *Industrial & Engineering Chemistry Research*, **2012**, 51, 607-613	3.9	34
323	Thermodynamics of Nanoscale Lead Titanate and Barium Titanate Perovskites. *Journal of the American Ceramic Society*, **2012**, 95, 3254-3262	3.8	10
322	Yttria-stabilized hafnia: Thermochemistry of formation and hydration of nanoparticles. *Journal of Materials Research*, **2012**, 27, 1022-1028	2.5	4
321	Energetics of Dysprosia-Stabilized Bismuth Oxide Electrolytes. *Chemistry of Materials*, **2012**, 24, 4185-4191	9.6	12

320	Nanostructure and Energetics of Carbon-Rich SiCN Ceramics Derived from Polysilylcarbodiimides: Role of the Nanodomain Interfaces. *Chemistry of Materials*, **2012**, 24, 1181-1191	9.6	64
319	Heat Capacity Studies of Surface Water Confined on Cassiterite (SnO2) Nanoparticles. *Journal of Physical Chemistry C*, **2012**, 116, 3910-3917	3.8	23
318	Effect of boron on the thermodynamic stability of amorphous polymer-derived Si(B)CN ceramics. *Acta Materialia*, **2012**, 60, 4514-4522	8.4	34
317	Amorphous iron (II) carbonate: Crystallization energetics and comparison to other carbonate minerals related to CO2 sequestration. *Geochimica Et Cosmochimica Acta*, **2012**, 87, 61-68	5.5	44
316	Understanding the stability of fluorosulfate Li-ion battery cathode materials: a thermochemical study of LiFe1MnxSO4F (0 x 1) polymorphs. *Journal of Materials Chemistry*, **2012**, 22, 24446		25
315	Thermochemistry of (CaxSr1-x)TiO3, (BaxSr1-x)TiO3, and (BaxCa1-x)TiO3 Perovskite Solid Solutions. *Journal of the American Ceramic Society*, **2012**, 95, 1717-1726	3.8	17
314	Thermodynamics of the magnetite-ulvspinel (Fe3O4-Fe2TiO4) solid solution. *American Mineralogist*, **2012**, 97, 1330-1338	2.9	36
313	Oxide melt solution calorimetry of Fe2+-bearing oxides and application to the magnetitemaghemite (Fe3O4e8/3O4) system. *American Mineralogist*, **2012**, 97, 164-175	2.9	22
312	Enthalpies of formation and insights into defect association in ceria singly and doubly doped with neodymia and samaria. *Solid State Ionics*, **2012**, 227, 17-22	3.3	20
311	Enthalpy of formation of Ln2O2CO3 II (Ln=La, Nd, Eu) and thermodynamics of decomposition equilibria. *Thermochimica Acta*, **2012**, 550, 76-82	2.9	10
310	Fluorite-pyrochlore transformation in Eu2Zr2O7direct calorimetric measurement of phase transition, formation and surface enthalpies. *RSC Advances*, **2012**, 2, 3328	3.7	45
309	Thermodynamics of manganese oxides: Effects of particle size and hydration on oxidation-reduction equilibria among hausmannite, bixbyite, and pyrolusite. *American Mineralogist*, **2012**, 97, 1291-1298	2.9	66
308	Thermodynamics of the CoOZnO System at Bulk and Nanoscale. *Chemistry of Materials*, **2012**, 24, 2311-2315	9.6	24
307	Energetics of cation mixing in urania-ceria solid solutions with stoichiometric oxygen concentrations. *Physical Chemistry Chemical Physics*, **2012**, 14, 5680-5	3.6	10
306	Nuclear fuel in a reactor accident. *Science*, **2012**, 335, 1184-8	33.3	328
305	Energetics of stepwise disordering transformation in pyrochlores, RE2Ti2O7 (RE = Y, Gd and Dy). *Acta Materialia*, **2012**, 60, 4303-4310	8.4	21
304	Thermodynamics of NiAl2O4NiFe2O4 Spinel Solid Solutions. *Journal of the American Ceramic Society*, **2012**, 95, 423-430	3.8	15
303	Experimental Approaches to the Thermodynamics of Ceramics Above 1500C. *Journal of the American Ceramic Society*, **2012**, 95, 1463-1482	3.8	57

302	Transparent Nanocrystalline Pure and Ca-Doped MgO by Spark Plasma Sintering of Anhydrous Nanoparticles. *Journal of the American Ceramic Society*, **2012**, 95, 1185-1188	3.8	30
301	Uranyl peroxide enhanced nuclear fuel corrosion in seawater. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 1874-7	11.5	109
300	Yttria-stabilized zirconia crystallization in Al2O3/YSZ multilayers. *Journal of Materials Research*, **2012**, 27, 939-943	2.5	5
299	MOF-5: enthalpy of formation and energy landscape of porous materials. *Journal of the American Chemical Society*, **2011**, 133, 9184-7	16.4	46
298	Controllable Morphology of Engelhard Titanium Silicates ETS-4: Synthetic, Photocatalytic, and Calorimetric Studies. *Chemistry of Materials*, **2011**, 23, 1166-1173	9.6	8
297	The energetics of La4LiAuO8. *Journal of Materials Research*, **2011**, 26, 1188-1192	2.5	3
296	Grain-Boundary Enthalpies of Cubic Yttria-Stabilized Zirconia. *Journal of the American Ceramic Society*, **2011**, 94, 2181-2184	3.8	5
295	Yttrium Substitution in MTiO3 (M=Ca, Sr, Ba and Ca+Sr+Ba) Perovskites and Implication for Incorporation of Fission Products into Ceramic Waste Forms. *Journal of the American Ceramic Society*, **2011**, 94, 3112-3116	3.8	4
294	The Effect of Vacancy and Barium Substitution on the Stability of the Cesium Titanium Silicate Pollucite. *Journal of the American Ceramic Society*, **2011**, 94, 3053-3059	3.8	8
293	Nanoceria Energetics of Surfaces, Interfaces and Water Adsorption. *Journal of the American Ceramic Society*, **2011**, 94, 3992-3999	3.8	45
292	Direct Measurement of Surface Energy of CeO2 by Differential Scanning Calorimetry. *Journal of the American Ceramic Society*, **2011**, 94, 3679-3682	3.8	32
291	Energetics of mixing in ThO2CeO2 fluorite solid solutions. *Journal of Nuclear Materials*, **2011**, 419, 72-75	3.3	15
290	Application of scanning calorimetry to estimate soil organic matter loss after fires. *Journal of Thermal Analysis and Calorimetry*, **2011**, 104, 351-356	4.1	2
289	Nanoscale effects on thermodynamics and phase equilibria in oxide systems. *ChemPhysChem*, **2011**, 12, 2207-15	3.2	135
288	Synthesis and thermochemistry of relaxor ferroelectrics in the lead magnesium niobateLead titanate (PMNPT) solid solutions series. *Journal of Materials Chemistry*, **2011**, 21, 1837-1845		7
287	Actinide Dioxides in Water: Interactions at the Interface. *Journal of Physical Chemistry Letters*, **2011**, 2, 3130-3134	6.4	29
286	Experimental Methodologies for Assessing the Surface Energy of Highly Hygroscopic Materials: The Case of Nanocrystalline Magnesia. *Journal of Physical Chemistry C*, **2011**, 115, 23929-23935	3.8	32
285	Energetics of single-wall carbon nanotubes as revealed by calorimetry and neutron scattering. *Carbon*, **2011**, 49, 949-954	10.4	17

284	Thermochemistry of proton containing borosilicate, aluminosilicate and gallosilicate zeolite beta. *Microporous and Mesoporous Materials*, **2011**, 142, 749-753	5.3	4
283	Enthalpy of formation of zinc acetate dihydrate. *Journal of Chemical Thermodynamics*, **2011**, 43, 980-982	2.9	13
282	Dynamics of Water Confined on the Surface of Titania and Cassiterite Nanoparticles. *Materials Research Society Symposia Proceedings*, **2011**, 1352, 47		2
281	Direct measurements of fusion and phase transition enthalpies in lanthanum oxide. *Journal of Materials Research*, **2011**, 26, 845-847	2.5	20
280	Surface enthalpy and enthalpy of water adsorption of nanocrystalline tin dioxide: Thermodynamic insight on the sensing activity. *Journal of Materials Research*, **2011**, 26, 848-853	2.5	32
279	Cadmium selenide: Surface and nanoparticle energetics. *Journal of Materials Research*, **2011**, 26, 720-725	2.5	14
278	Thermochemistry and Crystallization of Glass-Forming Y-Substituted Sr-Analogues of Fresnoite (Sr2TiSi2O8). *Journal of the American Ceramic Society*, **2010**, 93, 2055	3.8	7
277	Calorimetric Study of Heats of Mixing in SnxTi1⊠O2Rutile Solid Solutions. *Journal of the American Ceramic Society*, **2010**, 93, 3432-3436	3.8	12
276	Thermochemistry of Lanthana- and Yttria-Doped Thoria. *Journal of the American Ceramic Society*, **2010**, 93, 4142-4147	3.8	43
275	Calorimetric study of the surface energy of forsterite. *American Mineralogist*, **2010**, 95, 112-117	2.9	26
274	Hafnia: Energetics of thin films and nanoparticles. *Journal of Applied Physics*, **2010**, 107, 123514	2.5	33
273	First-principles computational study of defect clustering in solid solutions of ThO2 with trivalent oxides. *Physical Review B*, **2010**, 82,	3.3	20
272	Synthesis and calorimetric studies of oxide multilayer systems: Solid oxide fuel cell cathode and electrolyte materials. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C5A1-C5A5	1.3	3
271	Enthalpies of formation of pyrrhotite Fe1⊠0.125xS (0 ⊠x ⊠1) solid solutions. *American Mineralogist*, **2010**, 95, 717-723	2.9	4
270	29Si and 13C Solid-State NMR Spectroscopic Study of Nanometer-Scale Structure and Mass Fractal Characteristics of Amorphous Polymer Derived Silicon Oxycarbide Ceramics. *Chemistry of Materials*, **2010**, 22, 6221-6228	9.6	130
269	Calorimetric Measurement of Surface and Interface Enthalpies of Yttria-Stabilized Zirconia (YSZ). *Chemistry of Materials*, **2010**, 22, 2937-2945	9.6	59
268	Thermodynamics of solid electrolytes and related oxide ceramics based on the fluorite structure. *Journal of Materials Chemistry*, **2010**, 20, 10577		52
267	Transformation and crystallization energetics of synthetic and biogenic amorphous calcium carbonate. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 16438-43	11.5	318

266	Shape-dependent surface energetics of nanocrystalline TiO2. *Journal of Materials Chemistry*, **2010**, 20, 8639		33
265	Nanophase transition metal oxides show large thermodynamically driven shifts in oxidation-reduction equilibria. *Science*, **2010**, 330, 199-201	33.3	252
264	Enthalpies of formation of CdSxSe1⊠ solid solutions. *Journal of Materials Research*, **2009**, 24, 1368-1374	2.5	18
263	Thermochemistry of a synthetic Na-Mg-rich triple-chain silicate: Determination of thermodynamic variables. *American Mineralogist*, **2009**, 94, 1242-1254	2.9	5
262	Iron ore sintering. *Journal of Thermal Analysis and Calorimetry*, **2009**, 96, 353-361	4.1	7
261	Energetics of oxide nanoparticles. *International Journal of Quantum Chemistry*, **2009**, 109, 2647-2657	2.1	42
260	Surface Enthalpy, Enthalpy of Water Adsorption, and Phase Stability in Nanocrystalline Monoclinic Zirconia. *Journal of the American Ceramic Society*, **2009**, 92, 133-140	3.8	90
259	Thermochemistry and Aqueous Durability of Ternary Glass Forming Ba-Titanosilicates: Fresnoite (Ba2TiSi2O8) and Ba-Titanite (BaTiSiO5). *Journal of the American Ceramic Society*, **2009**, 92, 2053-2058	3.8	13
258	The Crystallization of Ba-Substituted CsTiSi2O6.5 Pollucite Using CsTiSi2O6.5 Seed Crystals. *Journal of the American Ceramic Society*, **2009**, 92, 2144-2146	3.8	8
257	Structure, Heat Capacity, and High-Temperature Thermal Properties of Yb14Mn1⊠AlxSb11. *Chemistry of Materials*, **2009**, 21, 1354-1360	9.6	84
256	Inelastic neutron scattering study of confined surface water on rutile nanoparticles. *Journal of Physical Chemistry A*, **2009**, 113, 2796-800	2.8	45
255	Thermochemistry of glass forming Y-substituted Sr-analogues of titanite (SrTiSiO5). *Journal of Materials Research*, **2009**, 24, 3380-3386	2.5	5
254	Thermochemistry of microporous and mesoporous materials. *Chemical Reviews*, **2009**, 109, 3885-902	68.1	137
253	Monoclinic to tetragonal transformations in hafnia and zirconia: A combined calorimetric and density functional study. *Physical Review B*, **2009**, 80,	3.3	89
252	Thermochemistry of lanthanum zirconate pyrochlore. *Journal of Materials Research*, **2009**, 24, 3350-3357	2.5	65
251	A correlation between the ionic conductivities and the formation enthalpies of trivalent-doped ceria at relatively low temperatures. *Physical Chemistry Chemical Physics*, **2009**, 11, 8580-5	3.6	36
250	Materials Science of High-Level Nuclear Waste Immobilization. *MRS Bulletin*, **2009**, 34, 46-53	3.2	233
249	Heat capacities and thermodynamic functions of TiO2 anatase and rutile: Analysis of phase stability. *American Mineralogist*, **2009**, 94, 236-243	2.9	172

248	Thermodynamic properties of feroxyhyte (?-FeOOH). *Clays and Clay Minerals*, **2008**, 56, 526-530	2.1	13
247	Size-driven structural and thermodynamic complexity in iron oxides. *Science*, **2008**, 319, 1635-8	33.3	544
246	Direct visualization of phase transition dynamics in binary supported phospholipid bilayers using imaging ellipsometry. *Soft Matter*, **2008**, 4, 1161-1164	3.6	16
245	Thermodynamic properties of CaTh(PO4)2 synthetic cheralite. *American Mineralogist*, **2008**, 93, 1356-1362	2.9	24
244	Thermodynamics of Silica Nanoparticle Self-Assembly in Basic Solutions of Monovalent Cations. *Journal of Physical Chemistry C*, **2008**, 112, 14754-14761	3.8	24
243	Enthalpy of formation of the cubic fluorite phase in the ceria?zirconia system. *Journal of Materials Research*, **2008**, 23, 1105-1112	2.5	16
242	Oxide-melt solution calorimetry of selenides: Enthalpy of formation of zinc, cadmium, and lead selenide. *American Mineralogist*, **2008**, 93, 779-783	2.9	13
241	Thermochemistry of nanoparticles on a substrate: Zinc oxide on amorphous silica. *Journal of Materials Research*, **2008**, 23, 1907-1915	2.5	10
240	Calorimetric study of CaCu3Ti4O12, a ceramic with giant permittivity. *Journal of Materials Research*, **2008**, 23, 1522-1531	2.5	11
239	Energetics of ZnO nanoneedles: Surface enthalpy, stability, and growth. *Journal of Materials Research*, **2008**, 23, 1652-1657	2.5	12
238	Surface Energetics of Nanocrystalline YSZ Powders. *Materials Research Society Symposia Proceedings*, **2008**, 1122, 6		
237	Enthalpy of formation and dehydration of alkaline earth cation exchanged zeolite beta. *Microporous and Mesoporous Materials*, **2008**, 109, 147-155	5.3	16
236	Calorimetric determination of energetics of solid solutions of UO2+x with CaO and Y2O3. *Journal of Nuclear Materials*, **2008**, 373, 39-43	3.3	13
235	Energetics of Cubic and Monoclinic Yttrium Oxide Polymorphs: Phase Transitions, Surface Enthalpies, and Stability at the Nanoscale. *Journal of Physical Chemistry C*, **2008**, 112, 932-938	3.8	73
234	Grain Growth-Controlled Giant Permittivity in Soft Chemistry CaCu3Ti4O12 Ceramics. *Journal of the American Ceramic Society*, **2008**, 91, 485-489	3.8	71
233	Constraint of Oxygen Fugacity During Field-Assisted Sintering: TiO2 as a Test Case. *Journal of the American Ceramic Society*, **2008**, 91, 970-974	3.8	1
232	Energetics of La2O3HfO2SiO2 Glasses. *Journal of the American Ceramic Society*, **2008**, 91, 1088-1094	3.8	6
231	Thermodynamically Stable SiwCxNyOz Polymer-Like, Amorphous Ceramics Made from Organic Precursors. *Journal of the American Ceramic Society*, **2008**, 91, 2391-2393	3.8	23

230	Energetics of SixOyCz Polymer-Derived Ceramics Prepared Under Varying Conditions. *Journal of the American Ceramic Society*, **2008**, 91, 2969-2974	3.8	43
229	Enthalpy of Formation of Carbon-Rich Polymer-Derived Amorphous SiCN Ceramics. *Journal of the American Ceramic Society*, **2008**, 91, 3349-3354	3.8	48
228	Fluorite and Pyrochlore Phases in the HfO2 -La2O3 -Gd2O3 Systems: Characterization and Calorimetric Study of Samples Quenched From Melts Formed by Laser Heating and Aerodynamic Levitation. *Materials Research Society Symposia Proceedings*, **2008**, 1122, 7		1
227	Calorimetric measurements of energetics of defect interactions in fluorite oxides. *Faraday Discussions*, **2007**, 134, 171-80; discussion 215-33, 415-9	3.6	35
226	Enthalpy of Water Adsorption and Surface Enthalpy of Goethite (□-FeOOH) and Hematite (□-Fe2O3). *Chemistry of Materials*, **2007**, 19, 825-833	9.6	58
225	Heats of Formation for Several Crystalline Polymorphs and Pressure-Induced Amorphous Forms of AMo2O8(A = Zr, Hf) and ZrW2O8. *Chemistry of Materials*, **2007**, 19, 468-476	9.6	24
224	Surface Enthalpies of Nanophase ZnO with Different Morphologies. *Chemistry of Materials*, **2007**, 19, 5687-5693	9.6	66
223	Elastic properties of yttrium-doped BaCeO3 perovskite. *Applied Physics Letters*, **2007**, 90, 161903	3.4	14
222	Compressibility and pressure-induced amorphization of guest-free melanophlogite: An in-situ synchrotron X-ray diffraction study. *American Mineralogist*, **2007**, 92, 166-173	2.9	13
221	Enthalpy of formation and dehydration of lithium and sodium zeolite beta. *Microporous and Mesoporous Materials*, **2007**, 98, 29-40	5.3	17
220	Energetics of cancrinite: Effect of salt inclusion. *Microporous and Mesoporous Materials*, **2007**, 98, 227-233	5.3	11
219	Enthalpies of formation of rare earth orthovanadates, REVO4. *Journal of Solid State Chemistry*, **2007**, 180, 847-851	3.3	37
218	Calorimetry of nanoparticles, surfaces, interfaces, thin films, and multilayers. *Journal of Chemical Thermodynamics*, **2007**, 39, 1-9	2.9	46
217	Kinetic Model for TiO2 Polymorphic Transformation from Anatase to Rutile. *Journal of the American Ceramic Society*, **2007**, 90, 250-255	3.8	50
216	Energetics of Cerium□irconium Substitution in the xCe0.8Y0.2O1.9(1□x)Zr0.8Y0.2O1.9 System. *Journal of the American Ceramic Society*, **2007**, 90, 584-589	3.8	6
215	Energetics of Defect Fluorite and Pyrochlore Phases in Lanthanum and Gadolinium Hafnates. *Journal of the American Ceramic Society*, **2007**, 90, 1171-1176	3.8	43
214	Systematics of Phase Transition and Mixing Energetics in Rare Earth, Yttrium, and Scandium Stabilized Zirconia and Hafnia. *Journal of the American Ceramic Society*, **2007**, 90, 2143-2150	3.8	36
213	Thermodynamically Stable SixOyCz Polymer-Like Amorphous Ceramics. *Journal of the American Ceramic Society*, **2007**, 90, 3213-3219	3.8	101

212	Atmospheric Pressure Synthesis of Heavy Rare Earth Sesquioxides Nanoparticles of the Uncommon Monoclinic Phase. *Journal of the American Ceramic Society*, **2007**, 90, 3683-3686	3.8	21
211	Application of calorimetry on a chip to high-pressure materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 9187-91	11.5	10
210	Energetics of rare-earth-doped hafnia. *Journal of Materials Research*, **2007**, 22, 876-885	2.5	18
209	The energetics of hematite dissolution in iron-oxide-rich melts: In situ high-temperature calorimetric studies. *American Mineralogist*, **2007**, 92, 1064-1070	2.9	3
208	Thermochemistry of A2M3O12 negative thermal expansion materials. *Journal of Materials Research* , **2007**, 22, 2512-2521	2.5	35
207	Energetics of CdSxSe1□ quantum dots in borosilicate glasses. *Journal of Non-Crystalline Solids*, **2007**, 353, 2785-2795	3.9	9
206	Dynamics of water confined on a TiO2 (anatase) surface. *Journal of Physical Chemistry A*, **2007**, 111, 12584-8	2.8	50
205	Calorimetric determination of the enthalpies of formation of hydrotalcite-like solids and their use in the geochemical modeling of metals in natural waters. *Clays and Clay Minerals*, **2006**, 54, 409-417	2.1	34
204	Energetics of cubic Si3N4. *Journal of Materials Research*, **2006**, 21, 41-44	2.5	21
203	Nickel Solubility and Precipitation in Soils: A Thermodynamic Study. *Clays and Clay Minerals*, **2006**, 54, 153-164	2.1	56
202	Thermodynamics of uranyl minerals: Enthalpies of formation of uranyl oxide hydrates. *American Mineralogist*, **2006**, 91, 658-666	2.9	36
201	Thermochemical study of trivalent-doped ceria systems: CeO2□MO1.5 (M = La, Gd, and Y). *Journal of Materials Research*, **2006**, 21, 3242-3251	2.5	47
200	TiO2 Stability Landscape: Polymorphism, Surface Energy, and Bound Water Energetics. *Chemistry of Materials*, **2006**, 18, 6324-6332	9.6	161
199	Energetics of Bulk and Nano-Akaganeite, β-FeOOH: Enthalpy of Formation, Surface Enthalpy, and Enthalpy of Water Adsorption. *Chemistry of Materials*, **2006**, 18, 1830-1838	9.6	77
198	Effect of structure and thermodynamic stability on the response of lanthanide stannate pyrochlores to ion beam irradiation. *Journal of Physical Chemistry B*, **2006**, 110, 2343-50	3.4	150
197	Surface Energy and Thermodynamic Stability of □Alumina: Effect of Dopants and Water. *Chemistry of Materials*, **2006**, 18, 1867-1872	9.6	84
196	Oxide melt solution calorimetry of sulfides: Enthalpy of formation of sphalerite, galena, greenockite, and hawleyite. *American Mineralogist*, **2006**, 91, 400-403	2.9	32
195	Formation and hydration enthalpies of the hydrosodalite family of materials. *Microporous and Mesoporous Materials*, **2006**, 88, 283-292	5.3	17

194	High-temperature calorimetry of zirconia: Heat capacity and thermodynamics of the monoclinic□tetragonal phase transition. *Journal of Chemical Thermodynamics*, **2006**, 38, 211-223	2.9	47
193	Thermochemical insights into refractory ceramic materials based on oxides with large tetravalent cations. *Journal of Materials Chemistry*, **2005**, 15, 1883		109
192	Thermochemistry of hydrotalcite-like phases in the MgO-Al2O3-CO2-H2O system: A determination of enthalpy, entropy, and free energy. *American Mineralogist*, **2005**, 90, 329-335	2.9	37
191	Energetics of Mesoporous Silica: Investigation into Pore Size and Symmetry. *Chemistry of Materials*, **2005**, 17, 3772-3783	9.6	36
190	Thermochemistry of Hydrotalcite-like Phases Intercalated with CO32-, NO3-, Cl-, I-, and ReO4-. *Chemistry of Materials*, **2005**, 17, 2455-2459	9.6	55
189	Thermodynamics of Oxide Systems Relevant to Alternative Gate Dielectrics **2005**, 57-108		20
188	Formation enthalpy of ThSiO4 and enthalpy of the thorite -ihuttonite phase transition. *Geochimica Et Cosmochimica Acta*, **2005**, 69, 4675-4683	5.5	43
187	Perovskite Solid Solutions along the NaNbO3□SrTiO3 Join: Phase Transitions, Formation Enthalpies, and Implications for General Perovskite Energetics. *Chemistry of Materials*, **2005**, 17, 1880-1886	9.6	45
186	Thermochemistry of La1-xSrxFeO3-□Solid Solutions (0.0 □x □1.0, 0.0 □□0.5). *Chemistry of Materials*, **2005**, 17, 2197-2207	9.6	58
185	Surface enthalpy of goethite. *Clays and Clay Minerals*, **2005**, 53, 113-122	2.1	29
184	Octahedral microporous phases Na2Nb2□TixO6□(OH)x□H2O and their related perovskites: Crystal chemistry, energetics, and stability relations. *Journal of Materials Research*, **2005**, 20, 618-627	2.5	10
183	Thermochemistry of iron manganese oxide spinels. *Journal of Solid State Chemistry*, **2005**, 178, 106-113	3.3	24
182	Energetics of La1□AxCrO3□perovskites (A=Ca or Sr). *Journal of Solid State Chemistry*, **2005**, 178, 234-244	3.3	26
181	Thermochemistry of Li1+xMn2□O4 (0?x?1/3) spinel. *Journal of Solid State Chemistry*, **2005**, 178, 1182-1189	3.3	28
180	LiMO2 (M=Mn, Fe, and Co): Energetics, polymorphism and phase transformation. *Journal of Solid State Chemistry*, **2005**, 178, 1230-1240	3.3	52
179	Nitrate cancrinite: Synthesis, characterization, and determination of the enthalpy of formation. *Microporous and Mesoporous Materials*, **2005**, 87, 146-152	5.3	23
178	Thermochemistry of Framework Titanosilicate A2TiSi6O15 (A=K, Rb, Cs). *Journal of the American Ceramic Society*, **2005**, 88, 1819-1825	3.8	12
177	Direct Calorimetric Measurement of Enthalpies of Phase Transitions at 2000□2400□C in Yttria and Zirconia. *International Studies Review*, **2005**, 7, 387-406	1	43

176	Crystal-chemical and energetic systematics of wadeite-type phases A2BSi3O9 (A = K, Cs; B = Si, Ti, Zr). *Physics and Chemistry of Minerals*, **2005**, 32, 426-435	1.6	22
175	Calorimetric insights into the synthesis of templated materials. *Current Opinion in Colloid and Interface Science*, **2005**, 10, 195-202	7.6	21
174	Heat capacities and absolute entropies of UTi2O6 and CeTi2O6. *Journal of Thermal Analysis and Calorimetry*, **2005**, 81, 617-625	4.1	10
173	Enthalpy of formation of yttria-doped ceria. *Journal of Materials Research*, **2005**, 20, 144-150	2.5	29
172	Direct measurements of water adsorption enthalpy on hafnia and zirconia. *Applied Physics Letters*, **2005**, 87, 164103	3.4	134
171	Enthalpy of Formation of Li[sub x]CoO[sub 2] (0.5 □x □1.0). *Journal of the Electrochemical Society*, **2005**, 152, J82	3.9	15
170	Enthalpies of formation of LaMO3 perovskites (M = Cr, Fe, Co, and Ni). *Journal of Materials Research* , **2005**, 20, 191-200	2.5	69
169	A simple tool for handling and loading capillary tubes. *Powder Diffraction*, **2005**, 20, 259-259	1.8	
168	Thermodynamics of uranyl minerals: Enthalpies of formation of rutherfordine, UO2CO3, andersonite, Na2CaUO2(CO3)3(H2O)5, and grimselite, K3NaUO2(CO3)3H2O. *American Mineralogist* , **2005**, 90, 1284-1290	2.9	26
167	Enthalpy of formation of cubic yttria-stabilized hafnia. *Journal of Materials Research*, **2004**, 19, 1855-1861	2.5	50
166	Correlation of Formation Enthalpies with Critical Amorphization Temperature for Pyrochlore and Monazite. *Materials Research Society Symposia Proceedings*, **2004**, 824, 225		4
165	Effect of La and Y on Crystallization Temperatures of Hafnia and Zirconia. *Journal of Materials Research*, **2004**, 19, 693-696	2.5	72
164	Energetic clues to pathways to biomineralization: precursors, clusters, and nanoparticles. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 12096-101	11.5	403
163	Thermodynamic and Structural Properties of Sodium Lithium Niobate Solid Solutions. *Journal of the American Ceramic Society*, **2004**, 85, 379-384	3.8	41
162	Crystal Chemistry and Phase Transitions in Substituted Pollucites along the CsAlSi2O6-CsTiSi2O6.5 Join: A Powder Synchrotron X-ray Diffractometry Study. *Journal of the American Ceramic Society*, **2004**, 85, 1235-1242	3.8	20
161	Energy Crossovers in Nanocrystalline Zirconia. *Journal of the American Ceramic Society*, **2004**, 88, 160-167	3.8	224
160	Direct Measurement of Relative Partial Molar Enthalpy of SiO2 in SiO2□M2O (M=Li, Na, K, Cs) Binary and SiO2□CaO□Al2O3 Ternary Melts. *Journal of the American Ceramic Society*, **2004**, 87, 1550-1555	3.8	23
159	Prototype Sandia Octahedral Molecular Sieve (SOMS) Na2Nb2O6□H2O: Synthesis, Structure and Thermodynamic Stability. *Chemistry of Materials*, **2004**, 16, 2034-2040	9.6	52

158	Formation enthalpies of rare earth titanate pyrochlores. *Journal of Solid State Chemistry*, **2004**, 177, 1858-1866	3.3	139
157	Thermodynamic properties, low-temperature heat-capacity anomalies, and single-crystal X-ray refinement of hydronium jarosite, (H3O)Fe3(SO4)2(OH)6. *Physics and Chemistry of Minerals*, **2004**, 31, 518-531	1.6	56
156	Crystallization in hafnia- and zirconia-based systems. *Physica Status Solidi (B): Basic Research*, **2004**, 241, 2268-2278	1.3	134
155	Crystal chemistry and energetics of pharmacosiderite-related microporous phases in the K2O□s2O□iO2□iO2□H2O system. *Microporous and Mesoporous Materials*, **2004**, 72, 209-218	5.3	17
154	Enthalpy of formation of LiNiO2, LiCoO2 and their solid solution, LiNi1□CoxO2. *Solid State Ionics*, **2004**, 166, 167-173	3.3	93
153	Early-Stage Reactions in Synthesis of TPA□ilicalite-1: Studies by in Situ Calorimetry, SAXS, and pH Measurements. *Chemistry of Materials*, **2004**, 16, 3682-3687	9.6	45
152	Study on Synthesis of TPA-Silicalite-1 from Initially Clear Solutions of Various Base Concentrations by in Situ Calorimetry, Potentiometry, and SAXS. *Chemistry of Materials*, **2004**, 16, 210-219	9.6	98
151	Thermochemistry of the alkali rare-earth double phosphates, A3RE(PO4)2. *Journal of Materials Research*, **2004**, 19, 2165-2175	2.5	54
150	Thermochemistry of jarosite-alunite and natrojarosite-natroalunite solid solutions. *Geochimica Et Cosmochimica Acta*, **2004**, 68, 2197-2205	5.5	53
149	Thermochemistry of rare-earth aluminate and aluminosilicate glasses. *Journal of Non-Crystalline Solids*, **2004**, 341, 141-151	3.9	34
148	Environmental Implications: Nanoparticle Geochemistry in Water and Air. *ACS Symposium Series*, **2004**, 92-96	0.4	1
147	Effect of La and Y on Crystallization Temperatures of Hafnia and Zirconia **2004**, 19, 693		1
146	Enthalpy of formation of cubic yttria-stabilized zirconia. *Journal of Materials Research*, **2003**, 18, 908-918	2.5	66
145	Stability of peroxide-containing uranyl minerals. *Science*, **2003**, 302, 1191-3	33.3	184
144	Thermodynamics of Fe oxides: Part II. Enthalpies of formation and relative stability of goethite (□-FeOOH), lepidocrocite (□FeOOH), and maghemite (□Fe2O3). *American Mineralogist*, **2003**, 88, 855-859	2.9	105
143	Thermodynamics of Fe oxides: Part I. Entropy at standard temperature and pressure and heat capacity of goethite (□-FeOOH), lepidocrocite (□FeOOH), and maghemite (□Fe2O3). *American Mineralogist*, **2003**, 88, 846-854	2.9	63
142	Thermochemistry of guest-free melanophlogite. *American Mineralogist*, **2003**, 88, 1612-1614	2.9	15
141	New thermochemical evidence on the stability of dickite vs. kaolinite. *American Mineralogist*, **2003**, 88, 837-845	2.9	18

140	On the thermochemistry of the solid solution between jarosite and its chromate analog. *American Mineralogist*, **2003**, 88, 1949-1954	2.9	24
139	Letters. Aluminum substitution in MgSiO3 perovskite: Investigation of multiple mechanisms by 27Al NMR. *American Mineralogist*, **2003**, 88, 1161-1164	2.9	27
138	Energetics of oxidation of RE–Si–Al–O–N glasses. *Journal of Materials Research*, **2003**, 18, 1607-1613	2.5	4
137	Phonon, Spin-Wave, and Defect Contributions to the Low-Temperature Specific Heat of α-FeOOH. *Journal of Low Temperature Physics*, **2003**, 130, 69-76	1.3	35
136	Thermodynamics of CoO–MgO solid solutions. *Journal of Chemical Thermodynamics*, **2003**, 35, 1151-1159	2.9	17
135	Energetics of nanoparticle oxides: interplay between surface energy and polymorphism. *Geochemical Transactions*, **2003**, 4, 1	3	223
134	Thermochemistry of Glasses in the Y2O3-Al2O3-SiO2 System. *Journal of the American Ceramic Society*, **2003**, 86, 1727-1732	3.8	24
133	Calorimetric Study of Nickel Molybdate: Heat Capacity, Enthalpy, and Gibbs Energy of Formation. *Journal of the American Ceramic Society*, **2003**, 86, 1927-1932	3.8	45
132	Enthalpies of formation of U-, Th-, Ce-brannerite: implications for plutonium immobilization. *Journal of Nuclear Materials*, **2003**, 320, 231-244	3.3	49
131	Aluminum in magnesium silicate perovskite: Formation, structure, and energetics of magnesium-rich defect solid solutions. *Journal of Geophysical Research*, **2003**, 108,		37
130	Enthalpies of formation of LaBO3 perovskites (B = Al, Ga, Sc, and In). *Journal of Materials Research*, **2003**, 18, 2501-2508	2.5	65
129	A New Series of Oxygen-Deficient Perovskites in the NaTixNb1-xO3-0.5x System: Synthesis, Crystal Chemistry, and Energetics. *Chemistry of Materials*, **2003**, 15, 1872-1878	9.6	36
128	Thermochemical Investigations of Zirconolite, Pyrochlore and Brannerite: Candidate Materials for the Immobilization of Plutonium. *Materials Research Society Symposia Proceedings*, **2003**, 807, 337		1
127	Aluminum in Magnesium Silicate Perovskite: Synthesis and Energetics of Defect Solid Solutions. *Materials Research Society Symposia Proceedings*, **2002**, 718, 1		2
126	Thermodynamics and crystal chemistry of the hematite–corundum solid solution and the FeAlO3 phase. *Physics and Chemistry of Minerals*, **2002**, 29, 515-526	1.6	43
125	An in situ calorimetric study of zeolite crystallization kinetics. *Microporous and Mesoporous Materials*, **2002**, 52, 93-103	5.3	21
124	High-silica zeolites: a relationship between energetics and internal surface areas. *Microporous and Mesoporous Materials*, **2002**, 54, 1-13	5.3	36
123	Enthalpies of formation of Ce-pyrochlore, Ca0.93Ce1.00Ti2.035O7.00, U-pyrochlore, Ca1.46U4+0.23U6+0.46Ti1.85O7.00 and Gd-pyrochlore, Gd2Ti2O7: three materials relevant to the proposed waste form for excess weapons plutonium. *Journal of Nuclear Materials*, **2002**, 303, 226-239	3.3	73

122	In Situ Calorimetric Study of the Growth of Silica TPA-MFI Crystals from an Initially Clear Solution. *Chemistry of Materials*, **2002**, 14, 2803-2811	9.6	57
121	Oxide melt solution calorimetry of rare earth oxides. *Magyar Apr□ad K□alem□ek*, **2002**, 69, 751-771	0	37
120	Energetics of nanocrystalline TiO2. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99 Suppl 2, 6476-81	11.5	442
119	The enthalpy of formation and internally consistent thermodynamic data of Mg-staurolite. *American Mineralogist*, **2002**, 87, 397-404	2.9	8
118	Thermodynamic Functions of Zirconolite and their Uses in Computer Simulation. *Materials Research Society Symposia Proceedings*, **2002**, 713, 1		1
117	Thermal analyses of bulk amorphous oxides and silicates of zirconium and hafnium. *Materials Research Society Symposia Proceedings*, **2002**, 745, 141		4
116	Thermodynamics of Pure-Silica Molecular Sieve Synthesis. *Journal of Physical Chemistry B*, **2002**, 106, 3629-3638	3.4	80
115	Energetics of anhydrite, barite, celestine, and anglesite: a high-temperature and differential scanning calorimetry study. *Geochimica Et Cosmochimica Acta*, **2002**, 66, 1839-1850	5.5	44
114	Formation Enthalpies of Tetravalent Lanthanide Perovskites by High Temperature Oxide Melt Solution Calorimetry. *Materials Research Society Symposia Proceedings*, **2002**, 718, 1		15
113	Thermochemistry of Substituted Perovskites in the NaTixNb1-xO3-0.5x System. *Materials Research Society Symposia Proceedings*, **2002**, 718, 1		1
112	Enthalpy of formation of CaSi2O5, a quenched high-pressure phase with pentacoordinate silicon. *Physics and Chemistry of Minerals*, **2001**, 28, 57-60	1.6	18
111	Thermal expansion and structural transformations of stuffed derivatives of quartz along the LiAlSiO4□SiO2 join: a variable-temperature powder synchrotron XRD study. *Physics and Chemistry of Minerals*, **2001**, 28, 302-312	1.6	15
110	Calorimetric study of perovskite solid solutions in the CaSiO3□CaGeO3 system. *Physics and Chemistry of Minerals*, **2001**, 28, 413-420	1.6	15
109	Thermodynamic data of the high-pressure phase Mg5Al5Si6O21(OH)7 (Mg-sursassite). *Physics and Chemistry of Minerals*, **2001**, 28, 475-487	1.6	10
108	Thermodynamic data of lawsonite and zoisite in the system CaO□Al2O3□SiO2□H2O based on experimental phase equilibria and calorimetric work. *Contributions To Mineralogy and Petrology*, **2001**, 142, 298-308	3.5	16
107	Enthalpies of formation of microporous titanosilicates ETS-4 and ETS-10. *Microporous and Mesoporous Materials*, **2001**, 47, 285-291	5.3	31
106	The assessment of thermodynamic parameters in the Al2O3-Y2O3 system and phase relations in the Y-Al-O system. *Scandinavian Journal of Metallurgy*, **2001**, 30, 175-183		71
105	High-temperature oxide melt calorimetry of oxides and nitrides. *Journal of Chemical Thermodynamics*, **2001**, 33, 859-871	2.9	18

104	Thermodynamics of Formation of Binary and Ternary Nitrides in the System Ce/Mn/N. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2001**, 627, 194-200	1.3	9
103	Thermochemistry of rare-earth orthophosphates. *Journal of Materials Research*, **2001**, 16, 2623-2633	2.5	196
102	Synthesis, Structure Determination, and Aqueous Durability of Cs2ZrSi3O9. *Journal of the American Ceramic Society*, **2001**, 84, 153-160	3.8	35
101	Energetics of Substituted Pollucites Along the CsAlSi2O6□CsTiSi2O6.5 Join: A High-Temperature Calorimetric Study. *Journal of the American Ceramic Society*, **2001**, 84, 555-560	3.8	28
100	Calorimetric determination of the enthalpy of formation of InN and comparison with AlN and GaN. *Journal of Materials Research*, **2001**, 16, 2824-2831	2.5	52
99	Enthalpies of formation of lanthanide oxyapatite phases. *Journal of Materials Research*, **2001**, 16, 2780-2783	2.5	47
98	Crystal properties and energetics of synthetic kaolinite. *American Mineralogist*, **2001**, 86, 304-311	2.9	22
97	A calorimetric study of zoisite and clinozoisite solid solutions. *American Mineralogist*, **2001**, 86, 80-91	2.9	2
96	Thermodynamics of ion-exchanged and natural clinoptilolite. *American Mineralogist*, **2001**, 86, 438-447	2.9	19
95	Thermochemical study of calcium zeolites□eulandite and stilbite. *American Mineralogist*, **2001**, 86, 448-455	2.9	50
94	Vitreous forsterite (Mg2SiO4): Synthesis, structure, and thermochemistry. *Geophysical Research Letters*, **2001**, 28, 2517-2520	4.9	83
93	Thermochemical studies of nitrides and oxynitrides by oxidative oxide melt calorimetry. *Journal of Alloys and Compounds*, **2001**, 321, 300-306	5.7	27
92	Energetics of dissolution of Gd2O3 and HfO2 in sodium alumino-borosilicate glasses. *Journal of Non-Crystalline Solids*, **2001**, 296, 93-101	3.9	34
91	Thermochemistry of complex perovskites. *AIP Conference Proceedings*, **2000**,	0	8
90	Enthalpies of Formation of Gd2(Ti2-xZrx)O7 Pyrochlores. *Materials Research Society Symposia Proceedings*, **2000**, 663, 1		26
89	29Si and 27Al MAS-NMR spectroscopy of b-eucryptite (LiAlSiO4): The enthalpy of Si,Al ordering. *American Mineralogist*, **2000**, 85, 181-188	2.9	20
88	Energetics of formation and hydration of ion-exchanged zeolite Y. *Microporous and Mesoporous Materials*, **2000**, 37, 175-186	5.3	68
87	Possible presence of high-pressure ice in cold subducting slabs. *Nature*, **2000**, 408, 844-7	50.4	80

86	Energetics of binary iron nitrides. *Solid State Sciences*, **2000**, 2, 457-462	3.4	74
85	Nanomaterials in the Environment, Agriculture, and Technology (NEAT). *Journal of Nanoparticle Research*, **2000**, 2, 321-323	2.3	39
84	Enthalpy of Formation of Gallium Nitride. *Journal of Physical Chemistry B*, **2000**, 104, 4060-4063	3.4	58
83	The enthalpy of transformation of Ca(OH)2-I (portlandite) to Ca(OH)2-II (EuI2 structure) by low-temperature DSC. *Physics and Chemistry of Minerals*, **2000**, 27, 604-609	1.6	4
82	Surface Enthalpy of Boehmite. *Clays and Clay Minerals*, **2000**, 48, 699-707	2.1	37
81	Energetics of oxidation of oxynitrides: ZrNO, Y2rNO, Ca2rNO, and Mg2rNO. *Journal of Materials Research*, **2000**, 15, 2558-2570	2.5	18
80	Thermochemistry of microporous silicotitanate phases in the Na2O s2O SiO2 TiO2 H2O system. *Journal of Materials Research*, **2000**, 15, 815-823	2.5	31
79	High temperature calorimetric studies of the heat of solution of La2O3 in silicate liquids. *Journal of Non-Crystalline Solids*, **2000**, 265, 238-251	3.9	40
78	Energetics of X-ray-amorphous zirconia and the role of surface energy in its formation. *Journal of Non-Crystalline Solids*, **2000**, 262, 106-113	3.9	43
77	Thermochemistry of Pure-Silica Zeolites. *Journal of Physical Chemistry B*, **2000**, 104, 10001-10011	3.4	175
76	Effects of Water, Cations, and Structure on Energetics of Layer and Framework Phases, NaxMgyMnO2 hH2O. *Journal of Physical Chemistry B*, **2000**, 104, 5035-5039	3.4	13
75	Energetics of kaolin polymorphs. *American Mineralogist*, **1999**, 84, 506-516	2.9	28
74	Calorimetric studies of the energetics of order-disorder in the system Mg1 FexCa(CO3)2. *American Mineralogist*, **1999**, 84, 1622-1626	2.9	19
73	The MgTiO3-FeTiO3join at high pressure and temperature. *American Mineralogist*, **1999**, 84, 1595-1603	2.9	32
72	Enthalpy of Formation of Rare-earth Silicates Y2SiO5 and Yb2SiO5 and N-containing Silicate Y10(SiO4)6N2. *Journal of Materials Research*, **1999**, 14, 1181-1185	2.5	43
71	Silicon nitride: Enthalpy of formation of the - and -polymorphs and the effect of C and O impurities. *Journal of Materials Research*, **1999**, 14, 1959-1968	2.5	49
70	High Temperature Reaction Calorimetry Applied to Metastable and Nanophase Materials. *Magyar Apr ad K lem yek*, **1999**, 57, 653-658	0	18
69	Thermodynamics of formation for zirconolite (CaZrTi2O7) fromT=298.15 K toT=1500 K. *Journal of Chemical Thermodynamics*, **1999**, 31, 229-243	2.9	54

68	Molar heat capacity and thermodynamic functions forCaTiO3. *Journal of Chemical Thermodynamics*, **1999**, 31, 1573-1583	2.9	57
67	Energetics of Rare Earth Manganese Perovskites A1−A?xMnO3 (A=La, Nd, Y and A?=Sr, La) Systems. *Journal of Solid State Chemistry*, **1999**, 145, 77-87	3.3	40
66	MANTLE GEOCHEMISTRY:Enhanced: A Lesson from Ceramics. *Science*, **1999**, 284, 1788-1789	33.3	84
65	Thermochemistry of Si6−AlzOzN8−(z = 0 to 3.6) materials. *Journal of Materials Research*, **1999**, 14, 4630-4636	2.5	22
64	Energetics of Ternary Nitride Formation in the (Li,Ca)(B,Al)N System. *Chemistry of Materials*, **1999**, 11, 1148-1152	9.6	28
63	Thermodynamics of Crystals. *Eos*, **1999**, 80, 143	1.5	
62	Input needed for Workshop on Mineral and Rock Physics. *Eos*, **1999**, 80, 184	1.5	
61	Chabazite: Energetics of hydration, enthalpy of formation, and effect of cations on stability. *American Mineralogist*, **1999**, 84, 1870-1882	2.9	42
60	Thermochemistry of stuffed quartz-derivative phases along the join LiAlSiO4-SiO2. *American Mineralogist*, **1999**, 84, 1360-1369	2.9	24
59	Evaluation of Thermally Converted Silicotitanate Waste Forms. *Materials Research Society Symposia Proceedings*, **1999**, 556, 77		23
58	Thermochemistry of Hf-Zirconolite, CaHfTi2O7. *Materials Research Society Symposia Proceedings*, **1999**, 556, 11		11
57	Enthalpy of formation of katoite Ca3Al2[(OH)4]3: Energetics of the hydrogarnet substitution. *American Mineralogist*, **1999**, 84, 389-391	2.9	11
56	A Calorimetric Study of the Lanthanide Aluminum Oxides and the Lanthanide Gallium Oxides: Stability of the Perovskites and the Garnets. *Journal of Solid State Chemistry*, **1998**, 141, 424-436	3.3	111
55	The Thermodynamics of Ordered Perovskites on the CaTiO3-FeTiO3 Join. *Physics and Chemistry of Minerals*, **1998**, 25, 591-596	1.6	13
54	Energetics and Crystal Chemical Systematics among Ilmenite, Lithium Niobate, and Perovskite Structures. *Chemistry of Materials*, **1998**, 10, 2787-2793	9.6	112
53	The Energetics of Cubic Zirconia from Solution Calorimetry of Yttria- and Calcia-Stabilized Zirconia. *Zeitschrift Fur Physikalische Chemie*, **1998**, 207, 59-65	3.1	23
52	Energetics of Nitridophosphates PON and LiNaPON Glasses. *Materials Research Society Symposia Proceedings*, **1998**, 547, 389		5
51	Radiation Effects in Glasses Used for Immobilization of High-level Waste and Plutonium Disposition. *Journal of Materials Research*, **1997**, 12, 1948-1978	2.5	323

50	Melt Energetics at High Temperature and Pressure. *Materials Research Society Symposia Proceedings*, **1997**, 499, 185		
49	Energetics of Stable and Metastable Low Temperature Iron Oxides and Oxyhydroxides. *Materials Research Society Symposia Proceedings*, **1997**, 481, 183		
48	Thermochemical Insights into Rapid Solid-State Reaction Synthesis of β-Sialon. *Journal of Physical Chemistry B*, **1997**, 101, 9433-9435	3.4	19
47	Energetics of Ternary Nitrides: Li2Ca2ZnN2 and Ca2TaN3 Systems. *Chemistry of Materials*, **1997**, 9, 1538-1546	9.6	44
46	Metastability of Spinel-type Solid Solutions in the SiO2-Al2O3 System. *Chemistry of Materials*, **1997**, 9, 3096-3100	9.6	22
45	Effects of Increased Surface Area and Chemisorbed H2O on the Relative Stability of Nanocrystalline γ-Al2O3 and α-Al2O3. *Journal of Physical Chemistry B*, **1997**, 101, 603-613	3.4	223
44	Surface Energies and Thermodynamic Phase Stability in Nanocrystalline Aluminas. *Science*, **1997**, 277, 788-791	33.3	759
43	Progress and new directions in high temperature calorimetry revisited. *Physics and Chemistry of Minerals*, **1997**, 24, 222-241	1.6	424
42	Ti4+ in silicate melts: Energetics from high-temperature calorimetric studies and implications for melt structure. *Geochimica Et Cosmochimica Acta*, **1996**, 60, 4123-4131	5.5	27
41	Thermochemistry and phase equilibria in calcium zeolites. *American Mineralogist*, **1996**, 81, 658-667	2.9	54
40	Thermochemistry of Metal Nitrides in the Ca/Zn/N System. *Chemistry - A European Journal*, **1996**, 2, 1514-1517	4.8	38
39	Thermodynamic Properties of Manganese Oxides. *Journal of the American Ceramic Society*, **1996**, 79, 1761-1768	3.8	117
38	Energetics in the brownmillerite-perovskite pseudobinary Ca2Fe2O5-CaTiO3. *Journal of Materials Research*, **1994**, 9, 3121-3124	2.5	21
37	Physics and Chemistry of Earth Materials **1994**,		56
36	Thermochemistry of carbonate-pyroxene equilibria. *Contributions To Mineralogy and Petrology*, **1993**, 114, 139-147	3.5	27
35	Energetics of Cobalt(II) Oxide with the Zinc-Blende Structure. *Journal of the American Ceramic Society*, **1993**, 76, 2465-2467	3.8	13
34	Structural Evolution of Alkoxide Silica Gels to Glass: Effect of Catalyst pH. *Journal of the American Ceramic Society*, **1993**, 76, 2571-2582	3.8	79
33	Negative Pressure-Temperature Slopes for Reactions Formign MgSiO3 Perovskite from Calorimetry. *Science*, **1990**, 249, 1275-8	33.3	162

32	Olivine-modified spinel-spinel transitions in the system Mg2SiO4-Fe2SiO4: Calorimetric measurements, thermochemical calculation, and geophysical application. *Journal of Geophysical Research*, **1989**, 94, 15671-15685		440
31	Energetics of compounds (A2+B4+O3) with the perovskite structure. *Journal of Solid State Chemistry*, **1988**, 72, 244-256	3.3	103
30	Thermochemistry of the tremolite-edenite amphiboles using fluorine analogues, and applications to amphibole-plagioclase-quartz equilibria. *Contributions To Mineralogy and Petrology*, **1986**, 93, 18-32	3.5	39
29	Thermodynamics of Solid-Solution Formation in NiO-CuO. *Journal of the American Ceramic Society*, **1986**, 69, 453-457	3.8	26
28	Thermochemistry and Structure of Low Pressure Chemically Vapor Deposited and Bulk SiO2 - P 2 O 5 and SiO2 - GeO2 Glasses. *Journal of the Electrochemical Society*, **1986**, 133, 431-439	3.9	10
27	Thermochemistry of Sodium Borosilicate Glasses. *Journal of the American Ceramic Society*, **1985**, 68, 314-319	3.8	88
26	Thermochemistry of Charge-Coupled Substitutions in Silicate Glasses: The Systems Ml/nn+ AlO2-SiO2 (M = Li, Na, K, Rb, Cs, Mg, Ca, Sr, Ba, Pb). *Journal of the American Ceramic Society*, **1984**, 67, 606-610	3.8	118
25	Calorimetric study of the stability of spinelloids in the system NiAl2O4-Ni2SiO4. *Physics and Chemistry of Minerals*, **1984**, 10, 166-172	1.6	17
24	Quantitative correlations of deviations from ideality in binary and pseudobinary solid solutions. *Journal of Solid State Chemistry*, **1983**, 46, 1-22	3.3	113
23	Trends and Systematics in Mineral Thermodynamics. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1982**, 86, 994-1001		3
22	Thermodynamics of solid solution formation in NiO?MgO and NiO?ZnO. *Journal of Solid State Chemistry*, **1981**, 38, 264-276	3.3	70
21	Thermochemistry of glasses and liquids in the systems CaMgSi2O6-CaAl2Si2O8-NaAlSi3O8, SiO2-CaAl2Si2O8-NaAlSi3O8 and SiO2-Al2O3-CaO-Na2O. *Geochimica Et Cosmochimica Acta*, **1980**, 44, 1409-1423	5.5	131
20	Lattice Stability of AX and AB2O4 Compounds. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **1980**, 4, 255-264	1.9	5
19	Progress and new directions in high temperature calorimetry. *Physics and Chemistry of Minerals*, **1977**, 2, 89-104	1.6	380
18	Calculation of subsolidus phase relations in carbonates and pyroxenes. *Physics and Chemistry of Minerals*, **1977**, 1, 109-127	1.6	31
17	Spinel disproportionation at high pressure: calorimetric determination of enthalpy of formation of Mg2SnO4 and Co2SnO4 and some implications for silicates. *Earth and Planetary Science Letters*, **1976**, 31, 247-254	5.3	19
16	Silicates and related minerals: Solid state chemistry and thermodynamics applied to geothermometry and geobarometry. *Progress in Solid State Chemistry*, **1976**, 11, 203-264	8	8
15	Thermodynamic relations among olivine, spinel, and phenacite structures in silicates and germanates. III. The system CuOMgOGeO2. *Journal of Solid State Chemistry*, **1974**, 11, 10-16	3.3	21

14	Thermodynamic relations among olivine, spinel, and phenacite structures in silicates and germanates: II. The systems NiO?ZnO?GeO2 and CoO?ZnO?GeO2. *Journal of Solid State Chemistry*, **1973**, 6, 42-47	3.3	12
13	Approximate activity-composition relations in the system MgO?ZnO at 1205□5□C. *Journal of Inorganic and Nuclear Chemistry*, **1972**, 34, 2115-2119		14
12	Activity-composition relations in the systems CoO?ZnO and NiO?ZnO at 1050□C. *Journal of Inorganic and Nuclear Chemistry*, **1971**, 33, 35-47		50
11	Enthalpies of transformation among the tetragonal, hexagonal, and glassy modifications of GeO2. *Journal of Inorganic and Nuclear Chemistry*, **1971**, 33, 1119-1124		31
10	Thermodynamics of formation of the silicates and germanates of some divalent transition metals and of magnesium. *Journal of Inorganic and Nuclear Chemistry*, **1971**, 33, 4035-4050		69
9	Thermodynamics of A3O4-B3O4 spinel solid solutions. *Journal of Inorganic and Nuclear Chemistry*, **1969**, 31, 59-72		28
8	Thermodynamics of formation of simple spinels. *Journal of Inorganic and Nuclear Chemistry*, **1968**, 30, 479-498		270
7	Calorimetric study of molten sodium molybdate-molybdenum trioxide mixtures at 970.degree.K. *Inorganic Chemistry*, **1967**, 6, 2119-2121	5.1	27
6	The thermodynamics of cation distributions in simple spinels. *Journal of Inorganic and Nuclear Chemistry*, **1967**, 29, 2701-2714		476
5	Enthalpy of transformation of a high-pressure polymorph of titanium dioxide to the rutile modification. *Science*, **1967**, 158, 388-9	33.3	41
4	Enthalpy of the Anatase-Rutile Transformation. *Journal of the American Ceramic Society*, **1967**, 50, 626-626	3.8	118
3	Enthalpies of Mixing in Silver Bromide□Alkali Bromide and Thallium Chloride□Alkali Chloride Liquid Mixtures. *Journal of Chemical Physics*, **1965**, 42, 3752-3757	3.9	24
2	New worlds, new chemistry, new ceramics. *International Journal of Ceramic Engineering & Science*,	2	
1	Aqueous spray-drying synthesis of alluaudite Na2+2xFe2□(SO4)3 sodium insertion material: studies of electrochemical activity, thermodynamic stability, and humidity-induced phase transition. *Journal of Solid State Electrochemistry*,1	2.6	0