Ekhard K H Salje

List of Publications by Year in Descending Order

573 papers	17,890 citations	65 h-index	102 g-index
599 ext. papers	19,096 ext. citations	2.9 avg, IF	6.94 L-index

#	Paper	IF	Citations
573	Probing the dynamic response of ferroelectric and ferroelastic materials by simultaneous detection of elastic and piezoelectric properties. *Journal of Alloys and Compounds*, **2022**, 903, 163857	5.7	0
572	Internal friction in complex ferroelastic twin patterns. *Acta Materialia*, **2022**, 228, 117787	8.4	1
571	Symmetry and strain analysis of combined electronic and structural instabilities in tungsten trioxide, WO3. *Journal of Applied Physics*, **2022**, 131, 215101	2.5	1
570	Piezoelectricity in nominally centrosymmetric phases. *Physical Review Research*, **2021**, 3,	3.9	4
569	Static and dynamic strain relaxation associated with the paraelectric-antiferroelectric phase transition in PbZrO3. *Journal of Alloys and Compounds*, **2021**, 898, 162804	5.7	1
568	Energy exponents of avalanches and Hausdorff dimensions of collapse patterns.. *Physical Review E*, **2021**, 104, 054138	2.4	2
567	Porosity in minerals. *AIMS Materials Science*, **2021**, 9, 1-8	1.9	0
566	The duration-energy-size enigma for acoustic emission. *Scientific Reports*, **2021**, 11, 5590	4.9	11
565	Crackling noise and bio-cementation. *Engineering Fracture Mechanics*, **2021**, 247, 107675	4.2	6
564	Ferroelastic Twinning in Minerals: A Source of Trace Elements, Conductivity, and Unexpected Piezoelectricity. *Minerals (Basel, Switzerland)*, **2021**, 11, 478	2.4	1
563	Crackling noise and avalanches in minerals. *Physics and Chemistry of Minerals*, **2021**, 48, 1	1.6	6
562	Twisting of a Pristine ⊞Fe Nanowire: From Wild Dislocation Avalanches to Mild Local Amorphization. *Nanomaterials*, **2021**, 11,	5.4	1
561	Cracking of human teeth: An avalanche and acoustic emission study. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 122, 104666	4.1	3
560	Avalanche criticality during ferroelectric/ferroelastic switching. *Nature Communications*, **2021**, 12, 345	17.4	11
559	Tip-induced flexoelectricity, polar vortices, and magnetic moments in ferroelastic materials. *Journal of Applied Physics*, **2021**, 129, 084104	2.5	1
558	Acoustic Emission Spectroscopy: Applications in Geomaterials and Related Materials. *Applied Sciences (Switzerland)*, **2021**, 11, 8801	2.6	1
557	Real-time monitoring dislocations, martensitic transformations and detwinning in stainless steel: Statistical analysis and machine learning. *Journal of Materials Science and Technology*, **2021**, 92, 31-39	9.1	4

556	Mild and wild ferroelectrics and their potential role in neuromorphic computation. *APL Materials*, **2021**, 9, 010903	5.7	4
555	Ferroelastic domain walls as templates for multiferroic devices. *Journal of Applied Physics*, **2020**, 128, 164104	2.5	6
554	Direct evidence of polar ferroelastic domain boundaries in semiconductor BiVO4. *Applied Physics Letters*, **2020**, 116, 232901	3.4	9
553	Twisting of pre-twinned □Fe nanowires: from mild to wild avalanche dynamics. *Acta Materialia*, **2020**, 195, 50-58	8.4	7
552	Polaronic States and Superconductivity in WO3-x. *Condensed Matter*, **2020**, 5, 32	1.8	6
551	Statistical analysis of emission, interaction and annihilation of phonons by kink motion in ferroelastic materials. *Applied Physics Letters*, **2020**, 116, 102902	3.4	6
550	Avalanches and mixing behavior of porous 316L stainless steel under tension. *Applied Physics Letters*, **2020**, 116, 111901	3.4	6
549	Enhancement of polar nature of domain boundaries in ferroelastic Pb(PO) by doping divalent-metal ions. *Journal of Physics Condensed Matter*, **2020**, 32, 345401	1.8	5
548	Enhanced piezoelectricity in twinned ferroelastics with nanocavities. *Physical Review Materials*, **2020**, 4,	3.2	7
547	First-principles characterization of single-electron polaron in WO3. *Physical Review Research*, **2020**, 2,	3.9	8
546	Fine structures of acoustic emission spectra: How to separate dislocation movements and entanglements in 316L stainless steel. *Applied Physics Letters*, **2020**, 117, 262901	3.4	8
545	Avalanches in ferroelectric, ferroelastic and coelastic materials: phase transition, domain switching and propagation. *Ferroelectrics*, **2020**, 569, 82-107	0.6	8
544	Avalanches from charged domain wall motion in BaTiO3 during ferroelectric switching. *APL Materials*, **2020**, 8, 011105	5.7	25
543	Domain Dynamics in Quantum-Paraelectric SrTiO_{3}. *Physical Review Letters*, **2020**, 124, 016801	7.4	14
542	Domain wall generated polarity in ferroelastics: Results from resonance piezoelectric spectroscopy, piezoelectric force microscopy, and optical second harmonic generation measurements in LaAlO3 with twin and tweed microstructures. *Physical Review B*, **2020**, 102,	3.3	7
541	Order-parameter coupling and strain relaxation behavior of Ti50Pd50□Crx martensites. *Physical Review B*, **2020**, 102,	3.3	2
540	Anisotropic avalanche dynamics during ferroelectric switching in BaTiO3 and 0.7Pb(Mg2/3Nb1/3)O3□.3PbTiO3. *Applied Physics Letters*, **2020**, 117, 172901	3.4	5
539	Current vortices and magnetic fields driven by moving polar twin boundaries in ferroelastic materials. *Npj Computational Materials*, **2020**, 6,	10.9	6

538	Domain-wall engineering and topological defects in ferroelectric and ferroelastic materials. *Nature Reviews Physics*, **2020**, 2, 634-648	23.6	54
537	Piezoelectricity and electrostriction in ferroelastic materials with polar twin boundaries and domain junctions. *Applied Physics Letters*, **2019**, 114, 202901	3.4	14
536	Rotatable precipitates change the scale-free to scale dependent statistics in compressed Ti nano-pillars. *Scientific Reports*, **2019**, 9, 3778	4.9	10
535	Temperature Chaos, Memory Effect, and Domain Fluctuations in the Spiral Antiferromagnet Dy. *Scientific Reports*, **2019**, 9, 5076	4.9	3
534	Acoustic Emission from Porous Collapse and Moving Dislocations in Granular Mg-Ho Alloys under Compression and Tension. *Scientific Reports*, **2019**, 9, 1330	4.9	19
533	Nano-indentation and avalanches in compressed porous SiO2. *Applied Physics Letters*, **2019**, 115, 071902	3.4	4
532	Periodicity-Doubling Cascades: Direct Observation in Ferroelastic Materials. *Physical Review Letters*, **2019**, 123, 087603	7.4	20
531	Avalanche dynamics of ferroelectric phase transitions in BaTiO3 and 0.7Pb(Mg2⁄3Nb1⁄3)O3-0.3PbTiO3 single crystals. *Applied Physics Letters*, **2019**, 115, 022901	3.4	7
530	Scale-invariant avalanche dynamics in the temperature-driven martensitic transition of a Cu-Al-Be single crystal. *Physical Review B*, **2019**, 99,	3.3	11
529	The interaction between vacancies and twin walls, junctions, and kinks, and their mechanical properties in ferroelastic materials. *Acta Materialia*, **2019**, 178, 26-35	8.4	16
528	Polar nature of domain boundaries in purely ferroelastic Pb3(PO4)2 investigated by second harmonic generation microscopy. *Physical Review B*, **2019**, 100,	3.3	15
527	Correlations between elastic, calorimetric, and polar properties of ferroelectric PbSc0.5Ta0.5O3 (PST). *Applied Physics Letters*, **2019**, 115, 161904	3.4	1
526	Ferroelectric switching in ferroelastic materials with rough surfaces. *Scientific Reports*, **2019**, 9, 15834	4.9	11
525	Change of crackling noise in granite by thermal damage: Monitoring nuclear waste deposits. *American Mineralogist*, **2019**, 104, 1578-1584	2.9	10
524	Ferroelectric switching and scale invariant avalanches in BaTiO3. *Physical Review Materials*, **2019**, 3,	3.2	40
523	Electrical studies of Barkhausen switching noise in ferroelectric PZT: Critical exponents and temperature dependence. *Physical Review Materials*, **2019**, 3,	3.2	20
522	Interaction of low-energy electrons with surface polarity near ferroelastic domain boundaries. *Physical Review Materials*, **2019**, 3,	3.2	9
521	Electrically driven ferroelastic domain walls, domain wall interactions, and moving needle domains. *Physical Review Materials*, **2019**, 3,	3.2	10

520	Electric-field-induced avalanches and glassiness of mobile ferroelastic twin domains in cryogenic SrTiO3. *Physical Review Research*, **2019**, 1,	3.9	9
519	Avalanche mixing and the simultaneous collapse of two media under uniaxial stress. *Physical Review E*, **2019**, 99, 023002	2.4	9
518	Avalanches in Compressed Sandstone: Crackling Noise under Confinement. *Crystals*, **2019**, 9, 582	2.3	6
517	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
516	Annealing of metamict gadolinite-(Y): X-ray diffraction, Raman, IR, and M□ssbauer spectroscopy. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2019**, 234, 587-593	1	2
515	LaAlO3: A substrate material with unusual ferroelastic properties. *Applied Physics Letters*, **2018**, 112, 042902	3.4	13
514	Locally preserved □-h□phase transition in natural radiation-damaged titanite (CaTiSiO): evidence from laser-induced photoluminescence and dielectric measurements. *Journal of Physics Condensed Matter*, **2018**, 30, 035403	1.8	3
513	Glassy behavior and dynamic tweed in defect-free multiferroics. *Applied Physics Letters*, **2018**, 112, 012901	3.4	7
512	Immobile defects in ferroelastic walls: Wall nucleation at defect sites. *Applied Physics Letters*, **2018**, 112, 092904	3.4	8
511	Evidence for a surface anomaly during the cubic-tetragonal phase transition in BaTiO3(001). *Applied Physics Letters*, **2018**, 113, 022901	3.4	10
510	Polarity of modulated Na0.5Bi0.5TiO3 and its slow structural relaxation. *Applied Physics Letters*, **2018**, 113, 032901	3.4	7
509	Experimental Evidence of Accelerated Seismic Release without Critical Failure in Acoustic Emissions of Compressed Nanoporous Materials. *Physical Review Letters*, **2018**, 120, 245501	7.4	25
508	Macroscopic symmetry breaking and piezoelectricity in relaxor ferroelectric lead magnesium niobate. *Applied Physics Letters*, **2018**, 113, 202901	3.4	10
507	Glasslike Dynamics of Polar Domain Walls in Cryogenic SrTiO_{3}. *Physical Review Letters*, **2018**, 121, 235701	7.4	15
506	Symmetry and three-dimensional anisotropy of polar domain boundaries observed in ferroelastic LaAlO3 in the complete absence of ferroelectric instability. *Physical Review B*, **2018**, 98,	3.3	20
505	Surface Proximity Effect, Imprint Memory of Ferroelectric Twins, and Tweed in the Paraelectric Phase of BaTiO. *Scientific Reports*, **2018**, 8, 13660	4.9	13
504	Intermittent flow under constant forcing: Acoustic emission from creep avalanches. *Applied Physics Letters*, **2018**, 112, 054101	3.4	19
503	Radiation-damage-induced transitions in zircon: Percolation theory applied to hardness and elastic moduli as a function of density. *Applied Physics Letters*, **2018**, 112, 201901	3.4	7

502	Quantification by aberration corrected (S)TEM of boundaries formed by symmetry breaking phase transformations. *Ultramicroscopy*, **2017**, 176, 194-199	3.1	2
501	Strain intermittency due to avalanches in ferroelastic and porous materials. *Journal of Physics Condensed Matter*, **2017**, 29, 224002	1.8	7
500	Ultrafast Switching in Avalanche-Driven Ferroelectrics by Supersonic Kink Movements. *Advanced Functional Materials*, **2017**, 27, 1700367	15.6	24
499	The noise of many needles: Jerky domain wall propagation in PbZrO3 and LaAlO3. *APL Materials*, **2017**, 5, 046102	5.7	21
498	Twinning in NiFeGaCo shape memory alloy: Temperature scaling beyond the Seeger model. *Scripta Materialia*, **2017**, 134, 24-27	5.6	8
497	Large recovery of six-fold twinned nanowires of Fe. *Acta Materialia*, **2017**, 125, 296-302	8.4	7
496	Analysis of crackling noise using the maximum-likelihood method: Power-law mixing and exponential damping. *Physical Review E*, **2017**, 96, 042122	2.4	41
495	Predicting mining collapse: Superjerks and the appearance of record-breaking events in coal as collapse precursors. *Physical Review E*, **2017**, 96, 023004	2.4	29
494	Imaging and tuning polarity at SrTiO domain walls. *Nature Materials*, **2017**, 16, 1203-1208	27	52
493	Ferrielectricity in the metal-organic ferroelectric tris-sarcosine calcium chloride. *Physical Review B*, **2017**, 95,	3.3	6
492	Re-entrant spin glass transitions: new insights from acoustic absorption by domain walls. *Scientific Reports*, **2017**, 7, 16846	4.9	6
491	Towards a Quantitative Analysis of Crackling Noise by Strain Drop Measurements. *Understanding Complex Systems*, **2017**, 59-76	0.4	
490	Ferroelastic Domain Collapse and Acoustic Emission: Non-equilibrium Behaviour of Multiferroic Materials. *Understanding Complex Systems*, **2017**, 137-156	0.4	3
489	Control of surface potential at polar domain walls in a nonpolar oxide. *Physical Review Materials*, **2017**, 1,	3.2	16
488	Avalanches and the Propagation and Retraction of Ferroelastic Needle Domains. *Understanding Complex Systems*, **2017**, 157-165	0.4	1
487	Direct Observation of Ferroelectric Domain Walls in LiNbO3: Wall-Meanders, Kinks, and Local Electric Charges. *Advanced Functional Materials*, **2016**, 26, 7599-7604	15.6	53
486	Avalanche criticalities and elastic and calorimetric anomalies of the transition from cubic Cu-Al-Ni to a mixture of 18R and 2H structures. *Physical Review B*, **2016**, 94,	3.3	22
485	Functional Twin Boundaries: Multiferroicity in Confined Spaces **2016**, 765-788		

484	Avalanche criticality during compression of porcine cortical bone of different ages. *Physical Review E*, **2016**, 93, 053001	2.4	20
483	Direct observation of polar tweed in LaAlO3. *Scientific Reports*, **2016**, 6, 27193	4.9	38
482	Robust templates for domain boundary engineering in ErMnO3. *New Journal of Physics*, **2016**, 18, 051001	2.9	8
481	Interface Driven Pseudo-Elasticity in a-Fe Nanowires. *Advanced Functional Materials*, **2016**, 26, 760-767	15.6	16
480	Influence of defects and domain walls on dielectric and mechanical resonances in LiNbO3. *Journal of Physics Condensed Matter*, **2016**, 28, 015901	1.8	14
479	Breakdown of Shape Memory Effect in Bent Cu-Al-Ni Nanopillars: When Twin Boundaries Become Stacking Faults. *Nano Letters*, **2016**, 16, 194-8	11.5	7
478	Functional Topologies in (Multi-) Ferroics: The Ferroelastic Template. *Springer Series in Materials Science*, **2016**, 83-101	0.9	3
477	Ferroelastic shear bands in Pb3(PO4)2. *Applied Physics Letters*, **2016**, 108, 022901	3.4	6
476	Ferroelastic Domain Boundary-Based Multiferroicity. *Crystals*, **2016**, 6, 163	2.3	6
475	Flexoelectricity, incommensurate phases and the Lifshitz point. *Journal of Physics Condensed Matter* , **2016**, 28, 075902	1.8	16
474	Parabolic temporal profiles of non-spanning avalanches and their importance for ferroic switching. *Applied Physics Letters*, **2016**, 108, 072904	3.4	15
473	Collapsing minerals: Crackling noise of sandstone and coal, and the predictability of mining accidents. *American Mineralogist*, **2016**, 101, 2751-2758	2.9	30
472	First-principles reinvestigation of bulk WO3. *Physical Review B*, **2016**, 94,	3.3	39
471	Metastable phase transformation and hcp-□transformation pathways in Ti and Zr under high hydrostatic pressures. *Applied Physics Letters*, **2016**, 109, 031912	3.4	13
470	Fracking and labquakes. *Philosophical Magazine*, **2016**, 96, 3686-3696	1.6	15
469	Flexoelectricity and the polarity of complex ferroelastic twin patterns. *Physical Review B*, **2016**, 94,	3.3	52
468	Tweed, twins, and holes. *American Mineralogist*, **2015**, 100, 343-351	2.9	19
467	Acoustic emission during the ferroelectric transition Pm 3□m to P4mm in BaTiO3 and the ferroelastic transition R 3□m-C2/c in Pb3(PO4)2. *Applied Physics Letters*, **2015**, 106, 152903	3.4	25

466	Modulated minerals as potential ferroic materials. *Journal of Physics Condensed Matter*, **2015**, 27, 305901	1.8	2
465	Polar twin boundaries and nonconventional ferroelectric switching. *Applied Physics Letters*, **2015**, 106, 212907	3.4	18
464	Domain glasses: Twin planes, Bloch lines, and Bloch points. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 2639-2648	1.3	20
463	Avalanches in compressed Ti-Ni shape-memory porous alloys: An acoustic emission study. *Physical Review E*, **2015**, 91, 060401	2.4	31
462	The exploration of the effect of microstructure on crackling noise systems. *Applied Physics Letters*, **2015**, 107, 071902	3.4	23
461	Polar domain walls trigger magnetoelectric coupling. *Scientific Reports*, **2015**, 5, 13784	4.9	23
460	Friction in ferroelastic and martensitic materials. *Journal of Physics: Conference Series*, **2015**, 602, 012018	0.3	1
459	Elastic softening of leucite and the lack of polar domain boundaries. *American Mineralogist*, **2015**, 100, 2159-2162	2.9	5
458	Effect of pores and grain size on the elastic and piezoelectric properties of quartz-based materials. *American Mineralogist*, **2015**, 100, 1165-1171	2.9	9
457	Heat transport by phonons and the generation of heat by fast phonon processes in ferroelastic materials. *AIP Advances*, **2015**, 5, 053604	1.5	8
456	Evidence of presence of tweed in PbSc 0.5 Ta 0.5 O 3 crystals based on acoustic emission frequency spectrum analysis. *Europhysics Letters*, **2015**, 111, 47001	1.6	
455	Strain-controlled thermal conductivity in ferroic twinned films. *Scientific Reports*, **2014**, 4, 6375	4.9	28
454	Direct evidence of polar nature of ferroelastic twin boundaries in CaTiO3 obtained by second harmonic generation microscope. *Physical Review B*, **2014**, 89,	3.3	62
453	Domain boundary-dominated systems: adaptive structures and functional twin boundaries. *Advances in Physics*, **2014**, 63, 267-326	18.4	85
452	Crackling Noise in Disordered Materials. *Annual Review of Condensed Matter Physics*, **2014**, 5, 233-254	19.7	141
451	Twin boundary profiles with linear-quadratic coupling between order parameters. *Journal of Physics Condensed Matter*, **2014**, 26, 342201	1.8	10
450	Predicting failure: acoustic emission of berlinite under compression. *Journal of Physics Condensed Matter*, **2014**, 26, 275401	1.8	35
449	Ferroelectric Bloch-line switching: A paradigm for memory devices?. *Applied Physics Letters*, **2014**, 105, 252904	3.4	37

448	Functional twin boundaries and tweed microstructures: a comparison between minerals and device materials. *Mineralogical Magazine*, **2014**, 78, 1725-1741	1.7	
447	Ferroelectric precursor behavior of highly cation-ordered PbSc0.5Ta0.5O3 detected by acoustic emission: Tweed and polar nanoregions. *Applied Physics Letters*, **2014**, 105, 212901	3.4	21
446	Thermal avalanches near a Mott transition. *Journal of Physics Condensed Matter*, **2014**, 26, 035701	1.8	3
445	Simulating acoustic emission: The noise of collapsing domains. *Physical Review B*, **2014**, 90,	3.3	36
444	Flicker vortex structures in multiferroic materials. *Applied Physics Letters*, **2014**, 105, 112906	3.4	18
443	Strain rate dependence of twinning avalanches at high speed impact. *Applied Physics Letters*, **2014**, 104, 162906	3.4	20
442	Highly mobile vortex structures inside polar twin boundaries in SrTiO3. *Applied Physics Letters*, **2014** , 104, 082907	3.4	34
441	Polar correlations and defect-induced ferroelectricity in cryogenic KTaO3. *Physical Review B*, **2014**, 90,	3.3	27
440	Avalanches in compressed porous SiO(2)-based materials. *Physical Review E*, **2014**, 90, 022405	2.4	64
439	Domain glass. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2061-2066	1.3	30
438	Avalanche correlations in the martensitic transition of a Cu-Zn-Al shape memory alloy: analysis of acoustic emission and calorimetry. *Journal of Physics Condensed Matter*, **2014**, 26, 125401	1.8	29
437	Thermal and athermal crackling noise in ferroelastic nanostructures. *Journal of Physics Condensed Matter*, **2014**, 26, 142201	1.8	19
436	Functional Twin Boundaries: Steps Towards Domain Boundary Engineering. *Springer Series in Materials Science*, **2014**, 201-223	0.9	
435	Mechanical spectroscopy in twinned minerals: Simulation of resonance patterns at high frequencies. *American Mineralogist*, **2013**, 98, 1449-1458	2.9	15
434	Twinning in Strained Ferroelastics: Microstructure and Statistics. *Jom*, **2013**, 65, 401-407	2.1	7
433	Polar precursor ordering in BaTiO3 detected by resonant piezoelectric spectroscopy. *Applied Physics Letters*, **2013**, 103, 142902	3.4	45
432	Multidomains made of different structural phases in multiferroic BiFeO3: A first-principles-based study. *Physical Review B*, **2013**, 88,	3.3	21
431	Ferroelectric precursor behavior in PbSc0.5Ta0.5O3 detected by field-induced resonant piezoelectric spectroscopy. *Physical Review B*, **2013**, 88,	3.3	39

430	Domains within domains and walls within walls: evidence for polar domains in cryogenic SrTiO3. *Physical Review Letters*, **2013**, 111, 247603	7.4	120
429	Elastic excitations in BaTiO3 single crystals and ceramics: Mobile domain boundaries and polar nanoregions observed by resonant ultrasonic spectroscopy. *Physical Review B*, **2013**, 87,	3.3	55
428	Interfaces in metamict titanite: the macroscopic mechanical properties after stepwise annealing. *Phase Transitions*, **2013**, 86, 23-32	1.3	
427	Dedicated TEM on domain boundaries from phase transformations and crystal growth. *Phase Transitions*, **2013**, 86, 15-22	1.3	1
426	Domain boundary engineering □recent progress and many open questions. *Phase Transitions*, **2013**, 86, 2-14	1.3	9
425	Statistical similarity between the compression of a porous material and earthquakes. *Physical Review Letters*, **2013**, 110, 088702	7.4	180
424	Functional twin boundaries. *Phase Transitions*, **2013**, 86, 1052-1059	1.3	7
423	Dynamically strained ferroelastics: Statistical behavior in elastic and plastic regimes. *Physical Review B*, **2013**, 87,	3.3	37
422	Noise and finite size effects in multiferroics with strong elastic interactions. *Applied Physics Letters*, **2013**, 102, 152909	3.4	13
421	Intermediate structures in radiation damaged titanite (CaTiSiO5): a Raman spectroscopic study. *Journal of Physics Condensed Matter*, **2013**, 25, 115402	1.8	14
420	Calorimetric Study of Avalanche Criticality in the Martensitic Phase Transition of Cu67.64Zn16.71Al15.65. *Materials Science Forum*, **2013**, 738-739, 46-50	0.4	
419	Noise of collapsing minerals: Predictability of the compressional failure in goethite mines. *American Mineralogist*, **2013**, 98, 609-615	2.9	46
418	Crackling noise during failure of alumina under compression: the effect of porosity. *Journal of Physics Condensed Matter*, **2013**, 25, 292202	1.8	36
417	Guest editors□note. *Phase Transitions*, **2013**, 86, 1051-1051	1.3	
416	Mechanical loss in multiferroic materials at high frequencies: friction and the evolution of ferroelastic microstructures. *Advanced Materials*, **2013**, 25, 3244-8	24	21
415	Resonant ultrasonic spectroscopy and resonant piezoelectric spectroscopy in ferroelastic lead phosphate, Pb3(PO4)2. *Journal of Physics Condensed Matter*, **2013**, 25, 465401	1.8	13
414	Direct observation of ferrielectricity at ferroelastic domain boundaries in CaTiO3 by electron microscopy. *Advanced Materials*, **2012**, 24, 523-7	24	200
413	Experimental and theoretical study of the vibrational properties of diaspore (□AlOOH). *Physics and Chemistry of Minerals*, **2012**, 39, 93-102	1.6	14

412	Nucleation, growth, and control of ferroelectric-ferroelastic domains in thin polycrystalline films. *Physical Review B*, **2012**, 86,	3.3	28
411	Magnetoelastic coupling and multiferroic ferroelastic/magnetic phase transitions in the perovskite KMnF3. *Physical Review B*, **2012**, 85,	3.3	48
410	Local Symmetry Breaking in the Bulk and in Domain Boundaries: Breit Wigner Damping of Phonons and Acoustic Resonances. *Ferroelectrics*, **2012**, 433, 111-122	0.6	1
409	Domain wall damping and elastic softening in SrTiO3: evidence for polar twin walls. *Physical Review Letters*, **2012**, 109, 187601	7.4	101
408	Domain Boundary Engineering in Ferroic and Multiferroic Materials: A Simple Introduction. *Springer Series in Materials Science*, **2012**, 1-18	0.9	3
407	Ferroelastic Materials. *Annual Review of Materials Research*, **2012**, 42, 265-283	12.8	227
406	Order-parameter coupling in the improper ferroelectric lawsonite. *Journal of Physics Condensed Matter*, **2012**, 24, 255901	1.8	4
405	High junction and twin boundary densities in driven dynamical systems. *Advanced Materials*, **2012**, 24, 5385-9	24	42
404	Evidence for direct impact damage in metamict titanite CaTiSiO *Journal of Physics Condensed Matter*, **2012**, 24, 052202	1.8	9
403	How to generate high twin densities in nano-ferroics: Thermal quench and low temperature shear. *Applied Physics Letters*, **2012**, 100, 222905	3.4	29
402	Raman spectroscopy of CaSnO3 at high temperature: a highly quasi-harmonic perovskite. *Journal of Physics Condensed Matter*, **2011**, 23, 425401	1.8	10
401	Linear quadratic order parameter coupling and multiferroic phase transitions. *Journal of Physics Condensed Matter*, **2011**, 23, 462202	1.8	22
400	Low amplitude, low frequency elastic measurements using Dynamic Mechanical Analyzer (DMA) spectroscopy. *Zeitschrift F Kristallographie*, **2011**, 226, 1-17		17
399	Dynamic heat flux experiments in Cu67.64Zn16.71Al15.65: Separating the time scales of fast and ultra-slow kinetic processes in martensitic transformations. *Applied Physics Letters*, **2011**, 99, 011906	3.4	23
398	Thermally activated proton hopping in lawsonite, the ferroelectric transition at 125 K, and the co-elastic phase transition at 270 K. *Journal of Physics Condensed Matter*, **2011**, 23, 112208	1.8	7
397	Line-broadening effects in the powder infrared spectrum of apatite. *Physics and Chemistry of Minerals*, **2011**, 38, 111-122	1.6	60
396	Unexpected controllable pair-structure in ferroelectric nanodomains. *Nano Letters*, **2011**, 11, 4619-25	11.5	29
395	Elastic and antiferromagnetic anomalies in Pr0.48Ca0.52MnO3 as determined by resonant ultrasonic spectroscopy. *Journal of Physics Condensed Matter*, **2011**, 23, 245401	1.8	1

394	Determination of iron sites and the amount of amorphization in radiation-damaged titanite (CaSiTiO5). *Journal of Physics Condensed Matter*, **2011**, 23, 105402	1.8	6
393	Interfacial Properties and Critical Avalanche Exponents of Shape Memory Alloys and Related Materials. *Solid State Phenomena*, **2011**, 172-174, 3-12	0.4	5
392	Thermally activated avalanches: Jamming and the progression of needle domains. *Physical Review B* , **2011**, 83,	3.3	110
391	Ferroic switching, avalanches, and the Larkin length: Needle domains in LaAlO3. *Applied Physics Letters*, **2011**, 99, 151915	3.4	31
390	Failure mechanism in porous materials under compression: crackling noise in mesoporous SiO2. *Philosophical Magazine Letters*, **2011**, 91, 554-560	1	63
389	High frequency elastic losses in LaAlO3 and its importance for LaAlO3/SrTiO3 heterojunctions. *Applied Physics Letters*, **2011**, 99, 051907	3.4	13
388	Elastic softening of metamict titanite CaTiSiO5: Radiation damage and annealing. *American Mineralogist*, **2011**, 96, 1254-1261	2.9	19
387	High pressure ferroelastic phase transition in SrTiO *Journal of Physics Condensed Matter*, **2011**, 23, 275901	1.8	12
386	Pressure-induced phase transition(s) in KMnF3 and the importance of the excess volume for phase transitions in perovskite structures. *Journal of Physics Condensed Matter*, **2011**, 23, 485901	1.8	8
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