SemÃ«n V Gorfman

List of Publications by Year
in descending order

35 papers	846 citations	471509 17 h-index	477307 29 g-index
40 all docs	40 docs citations	40 times ranked	1014 citing authors

#	Article	IF	Citations
1	Induced giant piezoelectricity in centrosymmetric oxides. Science, 2022, 375, 653-657.	12.6	59
2	Identification of a coherent twin relationship from high-resolution reciprocal-space maps. Acta Crystallographica Section A: Foundations and Advances, 2022, 78, 158-171.	0.1	2
3	Multipurpose diffractometer for in situ X-ray crystallography of functional materials. Journal of Applied Crystallography, 2021, 54, 914-923.	4.5	2
4	Measuring the Mean Inner Potential Of Bernal Graphite Using Off-axis Electron Holography. Microscopy and Microanalysis, 2021, 27, 694-697.	0.4	0
5	Geometrical prediction of cleavage planes in crystal structures. IUCrJ, 2021, 8, 793-804.	2.2	4
6	Electrically driven transient and permanent phase transformations in highly strained epitaxial BiFeO3 thin films. APL Materials, 2020, 8, .	5.1	2
7	Cleavage and surface energies of LiNbO3. Acta Materialia, 2020, 193, 338-349.	7.9	9
8	New method to measure domain-wall motion contribution to piezoelectricity: the case of PbZr_{0.65}Ti_{0.35}O₃ ferroelectric. Journal of Applied Crystallography, 2020, 53, 1039-1050.	4.5	8
9	Algorithms for target transformations of lattice basis vectors. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 713-718.	0.1	5
10	Intrinsic Ferroelectricity in Charge-Ordered Magnetite. Crystals, 2019, 9, 546.	2.2	5
11	Picometer polar atomic displacements in strontium titanate determined by resonant X-ray diffraction. Nature Communications, 2018, 9, 178.	12.8	27
12	Probing the intrinsic and extrinsic origins of piezoelectricity in lead zirconate titanate single crystals. Journal of Applied Crystallography, 2018, 51, 1396-1403.	4.5	14
13	Ferroelectric domain wall dynamics characterized with X-ray photon correlation spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6680-E6689.	7.1	15
14	Monoclinic distortion, polarization rotation and piezoelectricity in the ferroelectric Na_{0.5}Bi_{0.5}TiO₃. IUCrJ, 2018, 5, 417-427.	2.2	17
15	Local-scale structures across the morphotropic phase boundary in PbZr_{1â^'x}Ti _x O₃. IUCrJ, 2018, 5, 73-81.	2.2	24
16	Multichannel FPGA-Based Data-Acquisition-System for Time-Resolved Synchrotron Radiation Experiments. IEEE Transactions on Nuclear Science, 2017, 64, 1320-1326.	2.0	22
17	A microcontroller for in situ single-crystal diffraction measurements with a PILATUS-2M detector under an alternating electric field. Journal of Applied Crystallography, 2017, 50, 975-977.	4.5	9
18	Time and frequency-dependence of the electric field-induced phase transition in BaTiO3-BiZn1/2Ti1/2O3. Journal of Applied Physics, 2017, 122, .	2.5	14

#	Article	IF	Citations
19	A rapid two-dimensional data collection system for the study of ferroelectric materials under external applied electric fields. Journal of Applied Crystallography, 2016, 49, 1501-1507.	4.5	12
20	Large piezoelectricity in electric-field modified single crystals of SrTiO3. Applied Physics Letters, 2016, 109, .	3.3	30
21	Time-Resolved X-Ray Diffraction Reveals the Hidden Mechanism of High Piezoelectric Activity in a Uniaxial Ferroelectric. Physical Review Letters, 2015, 114, 097601.	7.8	17
22	Topology and temperature dependence of the diffuse X-ray scattering in Na_{0.5}Bi_{0.5}TiO₃ferroelectric single crystals. Journal of Applied Crystallography, 2015, 48, 1543-1550.	4.5	24
23	Combining high time and angular resolutions: time-resolved X-ray powder diffraction using a multi-channel analyser detector. Journal of Applied Crystallography, 2015, 48, 970-974.	4.5	11
24	Sub-microsecond X-ray crystallography: techniques, challenges, and applications for materials science. Crystallography Reviews, 2014, 20, 210-232.	1.5	26
25	Crystallography under External Electric Field. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 1953-1962.	1.2	31
26	Observation of a low-symmetry phase in Na_{0.5}Bi_{0.5}TiO₃crystals by optical birefringence microscopy. Journal of Applied Crystallography, 2012, 45, 444-452.	4.5	54
27	Evidence for a non-rhombohedral average structure in the lead-free piezoelectric material Na_{0.5}Bi_{0.5}TiO₃. Journal of Applied Crystallography, 2010, 43, 1409-1414.	4.5	219
28	Time-resolved x-ray diffraction study of the piezoelectric crystal response to a fast change of an applied electric field. Journal of Applied Physics, 2010, 108, 064911.	2.5	29
29	On the symmetry of the morphotropic phase boundary in ferroelectric BiScO3â€“PbTiO3 system. Applied Physics Letters, 2009, 95, .	3.3	27
30	Energy-dispersive Laue diffraction by means of a frame-store pnCCD. Journal of Applied Crystallography, 2009, 42, 1139-1146.	4.5	22
31	Horizontal Alignment of Chemical Vapor-Deposited SWNTs on Single-Crystal Quartz Surfaces: Further Evidence for Epitaxial Alignment. Journal of Physical Chemistry C, 2009, 113, 17087-17096.	3.1	36
32	X-ray diffraction study of the piezoelectric properties of BiB3O6 single crystals. Zeitschrift FÃ¼r Kristallographie, 2007, 222, 396-401.	1.1	21
33	X-ray diffraction by a crystal in a permanent external electric field: electric-field-induced structural response in Î±-GaPO4. Acta Crystallographica Section A: Foundations and Advances, 2006, 62, 1-10.	0.3	18
34	X-ray diffraction by a crystal in a permanent external electric field: general considerations. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, 387-396.	0.3	15
35	X-ray scattering amplitude of an atom in a permanent external electric field. Acta Crystallographica Section A: Foundations and Advances, 2003, 59, 221-227.	0.3	16