Anil K Singh

List of Publications by Year
in descending order

23 papers	1,851 citations	471509 17 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	1005 citing authors

#	Article	IF	Citations
1	Analysis of lattice strains measured under nonhydrostatic pressure. Journal of Applied Physics, 1998, 83, 7567-7575.	2.5	335
2	The lattice strains in a specimen (cubic system) compressed nonhydrostatically in an opposed anvil device. Journal of Applied Physics, 1993, 73, 4278-4286.	2.5	334
3	Elasticity and rheology of iron above 220â€‰GPa and the nature of the Earth's inner core. Nature, 1998, 396, 741-743.	27.8	253
4	Estimation of Single-Crystal Elastic Moduli from Polycrystalline X-Ray Diffraction at High Pressure: Application to FeO and Iron. Physical Review Letters, 1998, 80, 2157-2160.	7.8	222
5	Elasticity, shear strength, and equation of state of molybdenum and gold from x-ray diffraction under nonhydrostatic compression to 24 GPa. Journal of Applied Physics, 1999, 86, 6729-6736.	2.5	129
6	Equation of state of bismuth to 222 GPa and comparison of gold and platinum pressure scales to 145 GPa. Journal of Applied Physics, 2002, 92, 5892-5897.	2.5	108
7	The lattice strains in a specimen (hexagonal system) compressed nonhydrostatically in an opposed anvil high pressure setup. Journal of Applied Physics, 1994, 75, 4956-4962.	2.5	84
8	Measurement and analysis of nonhydrostatic lattice strain component in niobium to 145 GPa under various fluid pressure-transmitting media. Journal of Applied Physics, 2001, 90, 3269-3275.	2.5	75
9	High-pressure equation of state for Nb with a helium-pressure medium: Powder x-ray diffraction experiments. Physical Review B, 2006, 73, .	3.2	67
10	Ab initiocalculations of elastic properties of compressed Pt. Physical Review B, 2007, 76, .	3.2	35
11	Analysis of nonhydrostatic high-pressure diffraction data (cubic system): Assessment of various assumptions in the theory. Journal of Applied Physics, 2009, 106, .	2.5	34
12	Strength and elasticity of niobium under high pressure. Journal of Applied Physics, 2011, 109, 113539.	2.5	29
13	Elastic properties of the bcc structure of bismuth at high pressure. Journal of Applied Physics, 2006, 99, 103504.	2.5	28
14	X-ray diffraction line broadening under elastic deformation of a polycrystalline sample: An elastic-anisotropy effect. Journal of Applied Physics, 2001, 90, 2296-2302.	2.5	22
15	Strength of polycrystalline coarse-grained platinum to 330GPa and of nanocrystalline platinum to 70GPa from high-pressure x-ray diffraction data. Journal of Applied Physics, 2008, 103, .	2.5	22
16	In situx-ray diffraction of fast compressed iron: Analysis of strains and stress under non-hydrostatic pressure. Physical Review B, 2015, 91, .	3.2	22
17	Analysis of C₆₀fullerite compression under non-hydrostatic pressure. Philosophical Magazine Letters, 1993, 67, 379-384.	1.2	7
18	Thermoelectric power of tellurium under pressure up to 8 GPa. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1991, 64, 559-561.	0.6	5

#	Article	IF	Citations
19	Temperature dependence under pressure of the kinetics of crystallization of bulk amorphous selenium. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 67, 705-720.	0.6	5
20	Generation of pressure pulses by impacting an opposedâ€anvil setup with a lowâ€velocity projectile. Review of Scientific Instruments, 1989, 60, 253-257.	1.3	3
21	Measurement under pressure of thermoelectric power along the thickness of a thin specimen. Review of Scientific Instruments, 1991, 62, 1372-1373.	1.3	1
22	The effect of stress anisotropy on the lattice strains measured with an x-ray diffraction opposed anvil setup. AIP Conference Proceedings, 1994, , .	0.4	1
23	Negative differential stresses in niobium: Analysis of x-ray measured pressureâ€“volume data. Journal of Applied Physics, 2020, 128, 075901.	2.5	1