Ph DjÃ©mia

List of Publications by Year
in descending order

88	1,703	257101 24	315357 38
papers	citations	h-index	g-index

89	89	89	1934
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elastic and plastic properties of as-cast equimolar TiHfZrTaNb high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 654, 30-38.	2.6	146
2	On the microstructure and physical properties of untreated raffia textilis fiber. Composites Part A: Applied Science and Manufacturing, 2009, 40, 418-422.	3.8	97
3	Extrinsic mechanical size effects in thin ZrNi metallic glass films. Acta Materialia, 2015, 90, 232-241.	3.8	89
4	Structure, phase stability and elastic properties in the Ti1â€“xZrxN thin-film system: Experimental and computational studies. Acta Materialia, 2012, 60, 5601-5614.	3.8	71
5	Mechanical properties of diamond films: A comparative study of polycrystalline and smooth fine-grained diamonds by Brillouin light scattering. Journal of Applied Physics, 2001, 90, 3771-3779.	1.1	68
6	Elastic properties of ultrathin permalloy/alumina multilayer films using picosecond ultrasonics and Brillouin light scattering. Physical Review B, 2004, 70, .	1.1	60
7	Nondestructive evaluation of micrometric diamond films with an interferometric picosecond ultrasonics technique. Journal of Applied Physics, 2004, 95, 4157-4162.	1.1	48
8	Effects of Alkali Treatment on the Microstructure, Composition, and Properties of the Raffia textilis Fiber. BioResources, 2013, 8, .	0.5	48
9	Electronic structure and mechanical properties of ternary ZrTaN alloys studied byab initiocalculations and thin-film growth experiments. Physical Review B, 2014, 90, .	1.1	45
10	Spin-wave modes in Ni nanorod arrays studied by Brillouin light scattering. Physical Review B, 2009, 80, .	1.1	44
11	Brillouin scattering investigation of elastic properties of Cuâ€“Mo solid solution thin films. Journal of Applied Physics, 2001, 90, 756-762.	1.1	43
12	Alloying effects on the structure and elastic properties of hard coatings based on ternary transition metal (M = Ti, Zr or Ta) nitrides. Surface and Coatings Technology, 2014, 257, 129-137.	2.2	43
13	Defects and magnetic properties in Mn-implanted<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:mtext>C</mml:mtext></mml:mrow></mml:math>-SiC epilayer on Si(100): Experiments and first-principles calculations. Physical Review B, 2008, 78, .	1.1	39
14	Structural and elastic properties of ternary metal nitrides TixTa1â^'xN alloys: First-principles calculations versus experiments. Surface and Coatings Technology, 2013, 215, 199-208.	2.2	39
15	Surface acoustic waves in the GHz range generated by periodically patterned metallic stripes illuminated by an ultrashort laser pulse. Journal of the Acoustical Society of America, 2001, 110, 1943-1949.	0.5	38
16	Hardness and elasticity in cubic ruthenium dioxide. Applied Physics Letters, 2001, 79, 2169-2171.	1.5	37
17	Elastic anisotropy of polycrystalline Au films: Modeling and respective contributions of X-ray diffraction, nanoindentation and Brillouin light scattering. Acta Materialia, 2010, 58, 4998-5008.	3.8	36
18	Elastic properties of Î²-SiC films by Brillouin light scattering. Journal of Applied Physics, 2004, 95, 2324-2330.	1.1	35

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19	The nanostructure and mechanical properties of nanocomposite Nbx-CoCrCuFeNi thin films. Scripta Materialia, 2017, 139, 155-158.	2.6	35
20	Novel class of nanostructured metallic glass films with superior and tunable mechanical properties. Acta Materialia, 2021, 213, 116955.	3.8	32
21	Elastic-strain distribution in metallic film-polymer substrate composites. Applied Physics Letters, 2010, 96, 041905.	1.5	31
22	Reactive sputter deposition of CoCrCuFeNi in nitrogen/argon mixtures. Journal of Alloys and Compounds, 2018, 769, 881-888.	2.8	29
23	Large influence of vacancies on the elastic constants of cubic epitaxial tantalum nitride layers grown by reactive magnetron sputtering. Acta Materialia, 2020, 184, 254-266.	3.8	26
24	Ab initiocalculation of the elastic properties and the lattice dynamics of the ZnxCd1â^'xSe alloy. Semiconductor Science and Technology, 2009, 24, 045005.	1.0	25
25	Exploring the mechanical size effects in Zr65Ni35 thin film metallic glasses. Journal of Alloys and Compounds, 2014, 615, S90-S92.	2.8	25
26	Structural-elastic relationships of Zr-TL (TLÂ=ÂCu, Co, Ni) thin films metallic glasses. Journal of Alloys and Compounds, 2017, 707, 126-131.	2.8	24
27	Longitudinal sound velocities, elastic anisotropy, and phase transition of high-pressure cubic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math> ice to 82 GPa. Physical Review B, 2017, 96,	1.1	22
28	Experimental evidence for the role of supersaturated interfacial alloys on the shear elastic softening of Ni/Mo superlattices. Physical Review B, 2002, 65, .	1.1	21
29	Impurity-controlled film growth and elastic properties of CoCrCuFeNi thin films. Surface and Coatings Technology, 2017, 315, 475-483.	2.2	19
30	Brillouin light scattering observation of the transition from the superparamagnetic to the superferromagnetic state in nanogranular (SiO2)Co films. Journal of Applied Physics, 2008, 104, .	1.1	18
31	Elastic properties of Î±- and Î²-tantalum thin films. Thin Solid Films, 2019, 688, 137403.	0.8	18
32	Ab initiocalculation of the lattice dynamics of the Boron group-V compounds under high pressure. High Pressure Research, 2007, 27, 269-277.	0.4	17
33	Strain, interdiffusion, and microstructural evolution under ion irradiation inNi(111)â•Mo(110)multilayers: Interdependence with elastic properties. Physical Review B, 2005, 71, .	1.1	16
34	Lattice instability and elastic response of metastable Mo1â^'xSixthin films. Physical Review B, 2013, 88, .	1.1	16
35	Mechanical properties of CoCrCuFeNi multi-principal element alloy thin films on Kapton substrates. Surface and Coatings Technology, 2020, 402, 126474.	2.2	15
36	THEORETICAL INVESTIGATION OF THE ELASTIC PROPERTIES AND LATTICE DYNAMICS OF THE MgSxSe1-x ALLOY. Modern Physics Letters B, 2007, 21, 249-259.	1.0	13

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37	Structural and elastic properties of single-crystal and polycrystalline Ti1â^'xZrxN alloys: A computational study. Journal of Alloys and Compounds, 2012, 536, S138-S142.	2.8	13
38	Elastic Properties of Zinc Blende MnTe. Acta Physica Polonica A, 2004, 106, 239-247.	0.2	13
39	Elasticity and lattice vibrational properties of transparent polycrystalline yttriumâ€“aluminium garnet: Experiments and pair potential calculations. Journal of the European Ceramic Society, 2007, 27, 4719-4725.	2.8	12
40	Ab initio calculation of the elastic properties and the lattice dynamics of the AgBr1â^'xClx alloy. Computational Materials Science, 2009, 47, 308-313.	1.4	12
41	Structure, stress, and mechanical properties of Mo-Al-N thin films deposited by dc reactive magnetron cosputtering: Role of point defects. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	12
42	Elastic properties of single crystal diamond made by CVD. Diamond and Related Materials, 2007, 16, 962-965.	1.8	11
43	Surface and bulk characterizations of CNx thin films made by r.f. magnetron sputtering. Surface and Coatings Technology, 2002, 151-152, 184-188.	2.2	10
44	Elastic anisotropy and single-crystal moduli of solid argon up to 64ÂGPa from time-domain Brillouin scattering. Physical Review B, 2019, 99, .	1.1	10
45	Setup for high-temperature surface Brillouin light scattering: Application to opaque thin films and coatings. Review of Scientific Instruments, 2017, 88, 023903.	0.6	9
46	Characterization of elastomeric scaffolds developed for tissue engineering applications by compression and nanoindentation tests, Î¼-Raman and Î¼-Brillouin spectroscopies. Biomedical Optics Express, 2019, 10, 1649.	1.5	9
47	Mechanical and physicochemical properties of AlN thin films obtained by pulsed laser deposition. Superlattices and Microstructures, 2004, 36, 409-416.	1.4	8
48	Characterizations of CNx thin films made by ionized physical vapor deposition. Thin Solid Films, 2005, 482, 192-196.	0.8	8
49	High-intensity Brillouin light scattering by spin waves in a permalloy film under microwave resonance pumping. Journal of Applied Physics, 2007, 102, 103905.	1.1	8
50	Magnetic excitation in weak stripe domains: Ferromagnetic resonance and Brillouin light sattering studies. Journal of Physics: Conference Series, 2010, 200, 072107.	0.3	8
51	Structure, electrical conductivity, critical superconducting temperature and mechanical properties of TiNxOy thin films. Surface and Coatings Technology, 2013, 237, 196-204.	2.2	8
52	Brillouin scattering from the icosahedral quasicrystal Al70.4Mn8.4Pd21.2. Solid State Communications, 1998, 106, 459-461.	0.9	7
53	Investigating the elastic properties of Î²-SiC films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 302-306.	2.6	7
54	Phase transition signature on elastic constants in Al1-xCrxNy ternary alloys thin films. Applied Physics Letters, 2013, 103, 041601.	1.5	7

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55	Prediction on temperature dependent elastic constants of â€œsoftâ€•metal Al by AIMD and QHA. Journal of Materials Science and Technology, 2020, 45, 92-97.	5.6	7
56	Elastic properties assessment in the multiferroic BiFeO3 by pump and probe method. Applied Physics Letters, 2021, 118, .	1.5	7
57	Brillouin scattering in ultrathin permalloy films: monolayers and multilayers with alumina interfaces. Journal of Magnetism and Magnetic Materials, 1997, 165, 428-430.	1.0	6
58	Mechanical characterizations of diamond carbon films made by PACVD. Surface and Coatings Technology, 2002, 151-152, 170-174.	2.2	6
59	Elastic properties of metastable Mo1â^'xSix alloy thin films: A Brillouin light scattering study. Surface and Coatings Technology, 2011, 206, 1824-1829.	2.2	6
60	Ab-initiocalculations of the photoelastic constants of the cubic SiC polytype. Journal of Physics: Conference Series, 2013, 454, 012060.	0.3	6
61	Effect of composition and nanostructure on the mechanical properties and thermal stability of Zr100-xCux thin film metallic glasses. Materials and Design, 2022, 219, 110752.	3.3	6
62	Thermal, electrical, and mechanical properties of hard nitrogen-alloyed Cr thin films deposited by magnetron sputtering. Surface and Coatings Technology, 2022, 441, 128575.	2.2	6
63	Ab initiocalculation of the elastic properties and the lattice dynamics of the AlAsxSb1â^'xalloy under pressure. High Pressure Research, 2011, 31, 310-324.	0.4	5
64	Structural and elastic properties of ternary silicides ScTSi (Tâ•Co, Ni, Cu, Ru, Rh, Pd, Ir, Pt) and of the equiatomic intermetallic compounds YTX (Tâ•Ni, Ir and Xâ•Si, Ge, Sn, Pb). Physica Status Solidi (B): Basic Research, 2015, 252, 2769-2777.	0.7	5
65	Annealing effect on elastic, magnetic and magnetoelastic properties of CoFeB thin films on polymer substrate. Journal Physics D: Applied Physics, 2017, 50, 455002.	1.3	5
66	Influence of elastic anisotropy on measured sound velocities and elastic moduli of polycrystalline cubic solids. Journal of Applied Physics, 2021, 130, .	1.1	5
67	Magnetic excitations in (SiO2)Co nano-composite films: Brillouin light scattering study. Journal of Magnetism and Magnetic Materials, 2009, 321, 876-879.	1.0	4
68	Electromechanical properties of single domain PZNâ€“12%PT measured by three different methods. Solid State Sciences, 2010, 12, 298-301.	1.5	3
69	First-principles calculation of the structural and elastic properties of ternary metal nitrides Ta_xMo_{1-x}N and Ta_xW_{1-x}N. Journal of Physics: Conference Series, 2015, 640, 012022.	0.3	3
70	Mechanical properties of elementary layers involved in a multilayer optical stack by photon-acoustic phonon interaction approaches. Journal of Applied Physics, 2018, 124, .	1.1	3
71	Thin films of binary amorphous Zn-Zr alloys developed by magnetron co-sputtering for the production of degradable coronary stents: A preliminary study. Bioactive Materials, 2018, 3, 385-388.	8.6	3
72	Mechanical properties of Li2MoO4 single crystals. Journal of Applied Physics, 2022, 131, .	1.1	3

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73	Study of texture effect on elastic properties of Au thin films by x-ray diffraction and Brillouin light scattering. Journal of Physics: Conference Series, 2007, 92, 012170.	0.3	2
74	Weak stripe domains vibrations description using Thiele equation. Journal of Physics: Conference Series, 2010, 200, 042027.	0.3	2
75	Sound Velocities and Elastic Moduli of Phases I and V of Silicon at High Pressures. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900173.	1.2	2
76	Elastic and magnetoelastic properties of TbMnO₃ single crystal by nanosecond time resolved acoustics and first-principles calculations. Journal of Physics Condensed Matter, 2021, 33, 495402.	0.7	2
77	Structural and Elastic Response of Mo/Ni Multilayers to Ion Irradiation. Materials Research Society Symposia Proceedings, 2000, 615, 871.	0.1	1
78	Brillouin light scattering in ferromagnetic single layers: hysteresis loop and backward geometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3244-3248.	0.8	1
79	AB INITIO CALCULATION OF THE LATTICE DYNAMICS OF THE ZnSe1-xTex ALLOY. Modern Physics Letters B, 2009, 23, 3453-3462.	1.0	1
80	Brillouin scattering of light by spin waves in ferromagnetic nanorods. Journal of Magnetism and Magnetic Materials, 2012, 324, 3406-3409.	1.0	1
81	Design of defected TaN supercells dataset for structural and elastic properties from ab initio simulations and comparison to experimental data. Data in Brief, 2020, 30, 105411.	0.5	1
82	Dynamical Viscoelastic Properties of Poly(Ester-Urethane) Biomaterial for Scaffold Applications. Lecture Notes in Mechanical Engineering, 2020, , 1-8.	0.3	1
83	Brillouin light scattering study of Langmuirâ€“Blodgett films: Elastic properties versus thickness. Journal of Applied Physics, 2003, 94, 3606-3611.	1.1	0
84	Study of spin waves in magnetic thin films submitted to external mechanical stresses.. EPJ Web of Conferences, 2010, 6, 26005.	0.1	0
85	X-ray strain analysis in thin films enhanced by 2D detection. EPJ Web of Conferences, 2010, 6, 26008.	0.1	0
86	Peculiar effective elastic anisotropy of nanometric multilayers studied by surface Brillouin scattering. Superlattices and Microstructures, 2015, 88, 551-560.	1.4	0
87	Identification of acoustic waves in ZnO materials by Brillouin light scattering for SAW device applications. Proceedings of SPIE, 2017, , .	0.8	0
88	Determination of elasticity constants of diamond carbon film coating by Brillouin light scattering. Revue De Metallurgie, 2004, 101, 103-108.	0.3	0