## Maritza Gj Veprek-Heijman

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5432635/publications.pdf

Version: 2024-02-01

22 papers 1,886 citations

16 h-index 18 g-index

22 all docs 22 docs citations

times ranked

22

1299 citing authors

#	Article	IF	CITATIONS
1	The deformation of the substrate during indentation into superhard coatings: Býckle's rule revised. Surface and Coatings Technology, 2015, 284, 206-214.	2.2	18
2	Limits to the preparation of superhard nanocomposites: Impurities, deposition and annealing temperature. Thin Solid Films, 2012, 522, 274-282.	0.8	52
3	Superhard nanocomposites: Origin of hardness enhancement, properties and applications. Surface and Coatings Technology, 2010, 204, 1898-1906.	2.2	140
4	Search for Ultrahard Materials and Recent Progress in the Understanding of Hardness Enhancement and Properties of Nanocomposites. Solid State Phenomena, 2010, 159, 1-10.	0.3	3
5	The Fundamentals of Hard and Superhard Nanocomposites and Heterostructures. , 2010, , 1-34.		0
6	The Fundamentals of Hard and Superhard Nanocomposites and Heterostructures., 2010,, 1-34.		0
7	Non-linear finite element constitutive modeling of indentation into super- and ultrahard materials: The plastic deformation of the diamond tip and the ratio of hardness to tensile yield strength of super- and ultrahard nanocomposites. Surface and Coatings Technology, 2009, 203, 3385-3391.	2.2	35
8	Industrial applications of superhard nanocomposite coatings. Surface and Coatings Technology, 2008, 202, 5063-5073.	2.2	342
9	Role of oxygen impurities in etching of silicon by atomic hydrogen. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 313-320.	0.9	50
10	The formation and role of interfaces in superhard nc-MenN/a-Si3N4 nanocomposites. Surface and Coatings Technology, 2007, 201, 6064-6070.	2.2	96
11	Chemistry, physics and fracture mechanics in search for superhard materials, and the origin of superhardness in nc-TiN/a-Si3N4 and related nanocomposites. Journal of Physics and Chemistry of Solids, 2007, 68, 1161-1168.	1.9	24
12	Tailoring Raney-catalysts for the selective hydrogenation of butyronitrile to n-butylamine. Journal of Catalysis, 2007, 245, 237-248.	3.1	47
13	Properties of superhard nc-TiN/a-BN and nc-TiN/a-BN/a-TiB2 nanocomposite coatings prepared by plasma induced chemical vapor deposition. Surface and Coatings Technology, 2006, 200, 2978-2989.	2.2	73
14	Different approaches to superhard coatings and nanocomposites. Thin Solid Films, 2005, 476, 1-29.	0.8	704
15	Thermally activated relaxation processes in superhard nc-TiN/a-SiN and nc-(TiAl)N/a-SiN nanocomposites studied by means of internal friction measurements. Composites Science and Technology, 2005, 65, 735-740.	3.8	20
16	Possible role of oxygen impurities in degradation of nc-TiN∕a-Si[sub 3]N[sub 4] nanocomposites. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, L17.	1.6	55
17	Conditions required for achieving superhardness of ≥45GPa in nc-TiN/a-Si3N4 nanocomposites. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2004, 384, 102-116.	2.6	115
18	Thermal stability of nc-TiN/a-BN/a-TiB2 nanocomposite coatings deposited by plasma chemical vapor deposition. Thin Solid Films, 2004, 467, 133-139.	0.8	72

#	Article	IF	CITATIONS
19	The origin of the fast blue photoluminescence from spark processed silicon. Thin Solid Films, 1997, 297, 171-175.	0.8	8
20	Magnetische Aufzeichnungsverfahren. Physik in Unserer Zeit, 1992, 23, 22-27.	0.0	O
21	Open questions regarding the mechanism of plasma-induced deposition of silicon. Plasma Chemistry and Plasma Processing, 1991, 11, 323-334.	1.1	25
22	Industrial Applications of Hard and Superhard Nanocomposite Coatings on Tools for Machining, Forming, Stamping and Injection Molding. Advanced Materials Research, 0, 1135, 218-233.	0.3	7