

Maritza Gj Veprek-Heijman

List of Publications by Year in descending order

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Version: 2024-02-01

22
papers

1,886
citations

516561

16
h-index

839398

18
g-index

22
all docs

22
docs citations

22
times ranked

1299
citing authors

#	ARTICLE	IF	CITATIONS
1	Different approaches to superhard coatings and nanocomposites. <i>Thin Solid Films</i> , 2005, 476, 1-29.	0.8	704
2	Industrial applications of superhard nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2008, 202, 5063-5073.	2.2	342
3	Superhard nanocomposites: Origin of hardness enhancement, properties and applications. <i>Surface and Coatings Technology</i> , 2010, 204, 1898-1906.	2.2	140
4	Conditions required for achieving superhardness of ≈ 45 GPa in nc-TiN/a-Si ₃ N ₄ nanocomposites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 384, 102-116.	2.6	115
5	The formation and role of interfaces in superhard nc-MenN/a-Si ₃ N ₄ nanocomposites. <i>Surface and Coatings Technology</i> , 2007, 201, 6064-6070.	2.2	96
6	Properties of superhard nc-TiN/a-BN and nc-TiN/a-BN/a-TiB ₂ nanocomposite coatings prepared by plasma induced chemical vapor deposition. <i>Surface and Coatings Technology</i> , 2006, 200, 2978-2989.	2.2	73
7	Thermal stability of nc-TiN/a-BN/a-TiB ₂ nanocomposite coatings deposited by plasma chemical vapor deposition. <i>Thin Solid Films</i> , 2004, 467, 133-139.	0.8	72
8	Possible role of oxygen impurities in degradation of nc-TiN/a-Si ₃ N ₄ nanocomposites. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005, 23, L17.	1.6	55
9	Limits to the preparation of superhard nanocomposites: Impurities, deposition and annealing temperature. <i>Thin Solid Films</i> , 2012, 522, 274-282.	0.8	52
10	Role of oxygen impurities in etching of silicon by atomic hydrogen. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 313-320.	0.9	50
11	Tailoring Raney-catalysts for the selective hydrogenation of butyronitrile to n-butylamine. <i>Journal of Catalysis</i> , 2007, 245, 237-248.	3.1	47
12	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. <i>Surface and Coatings Technology</i> , 2009, 203, 3385-3391.	2.2	35
13	Open questions regarding the mechanism of plasma-induced deposition of silicon. <i>Plasma Chemistry and Plasma Processing</i> , 1991, 11, 323-334.	1.1	25
14	Chemistry, physics and fracture mechanics in search for superhard materials, and the origin of superhardness in nc-TiN/a-Si ₃ N ₄ and related nanocomposites. <i>Journal of Physics and Chemistry of Solids</i> , 2007, 68, 1161-1168.	1.9	24
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. <i>Composites Science and Technology</i> , 2005, 65, 735-740.	3.8	20
16	The deformation of the substrate during indentation into superhard coatings: BÄ¼ckle's rule revised. <i>Surface and Coatings Technology</i> , 2015, 284, 206-214.	2.2	18
17	The origin of the fast blue photoluminescence from spark processed silicon. <i>Thin Solid Films</i> , 1997, 297, 171-175.	0.8	8
18	Industrial Applications of Hard and Superhard Nanocomposite Coatings on Tools for Machining, Forming, Stamping and Injection Molding. <i>Advanced Materials Research</i> , 0, 1135, 218-233.	0.3	7

#	ARTICLE	IF	CITATIONS
19	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
20	Magnetische Aufzeichnungsverfahren. Physik in Unserer Zeit, 1992, 23, 22-27.	0.0	0
21	The Fundamentals of Hard and Superhard Nanocomposites and Heterostructures. , 2010, , 1-34.		0
22	The Fundamentals of Hard and Superhard Nanocomposites and Heterostructures. , 2010, , 1-34.		0