Christian Mitterer

List of Publications by Citations

366 papers	12,198 citations	58 h-index	90 g-index
375 ext. papers	13,381 ext. citations	4.1 avg, IF	6.34 L-index

#	Paper	IF	Citations
366	Microstructural design of hard coatings. *Progress in Materials Science*, **2006**, 51, 1032-1114	42.2	682
365	Self-organized nanostructures in the TiAlN system. *Applied Physics Letters*, **2003**, 83, 2049-2051	3.4	477
364	Thermal stability of AlCrN hard coatings. *Scripta Materialia*, **2006**, 54, 1847-1851	5.6	201
363	Microstructure and mechanical/thermal properties of CrN coatings deposited by reactive unbalanced magnetron sputtering. *Surface and Coatings Technology*, **2001**, 142-144, 78-84	4.4	189
362	A comparative study on reactive and non-reactive unbalanced magnetron sputter deposition of TiN coatings. *Thin Solid Films*, **2002**, 415, 151-159	2.2	168
361	Microstructure and properties of nanocomposite TiBN and TiBC coatings. *Surface and Coatings Technology*, **1999**, 120-121, 405-411	4.4	158
360	Oxidation of vanadium nitride and titanium nitride coatings. *Surface Science*, **2007**, 601, 1153-1159	1.8	155
359	Structure, mechanical and tribological properties of sputtered Ti1-xAlxN coatings with 0.5≤x≤0.75. *Surface and Coatings Technology*, **2005**, 200, 2358-2365	4.4	155
358	Sputter deposition of ultrahard coatings within the system Ti-B-C-N. *Surface and Coatings Technology*, **1990**, 41, 351-363	4.4	149
357	Borides in Thin Film Technology. *Journal of Solid State Chemistry*, **1997**, 133, 279-291	3.3	148
356	Self-organized nanocolumnar structure in superhard TiB2 thin films. *Applied Physics Letters*, **2005**, 86, 131909	3.4	148
355	Application of hard coatings in aluminium die casting – soldering, erosion and thermal fatigue behaviour. *Surface and Coatings Technology*, **2000**, 125, 233-239	4.4	147
354	Vanadium containing self-adaptive low-friction hard coatings for high-temperature applications: A review. *Surface and Coatings Technology*, **2013**, 228, 1-13	4.4	143
353	Calorimetric evidence for frictional self-adaptation of TiAlN/VN superlattice coatings. *Surface and Coatings Technology*, **2004**, 177-178, 341-347	4.4	131
352	Magnéli phase formation of PVD MoN and WN coatings. *Surface and Coatings Technology*, **2006**, 201, 3335-3341	4.4	130
351	The origin of stresses in magnetron-sputtered thin films with zone T structures. *Acta Materialia*, **2010**, 58, 2621-2633	8.4	128
350	Influence of high-temperature oxide formation on the tribological behaviour of TiN and VN coatings. *Wear*, **2007**, 262, 1152-1158	3.5	128

349	Structure and properties of hard and superhard ZrCuN nanocomposite coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2000**, 289, 189-197	5.3	123
348	Structure–property relationships in single- and dual-phase nanocrystalline hard coatings. *Surface and Coatings Technology*, **2003**, 174-175, 725-731	4.4	120
347	High-temperature properties of nanocomposite TiBxNy and TiBxCy coatings. *Surface and Coatings Technology*, **2000**, 133-134, 131-137	4.4	111
346	A new low-friction concept for Ti1−xAlxN based coatings in high-temperature applications. *Surface and Coatings Technology*, **2004**, 188-189, 358-363	4.4	108
345	Oxidation kinetics of sputtered CrN hard coatings. *Surface and Coatings Technology*, **2001**, 146-147, 222-228	4.4	106
344	Thermal stability of PVD hard coatings. *Vacuum*, **2003**, 71, 279-284	3.7	105
343	Thermal stability of sputtered Al2O3 coatings. *Surface and Coatings Technology*, **2010**, 204, 1576-1581	4.4	104
342	Low-friction TiN–MoS2 coatings produced by dc magnetron co-deposition. *Surface and Coatings Technology*, **1998**, 108-109, 345-351	4.4	103
341	A New Low Friction Concept for High Temperatures: Lubricious Oxide Formation on Sputtered VN Coatings. *Tribology Letters*, **2004**, 17, 751-756	2.8	103
340	Energetic balance and kinetics for the decomposition of supersaturated Ti1−xAlxN. *Acta Materialia*, **2007**, 55, 1441-1446	8.4	95
339	Experiment and simulation of the compositional evolution of TiB thin films deposited by sputtering of a compound target. *Journal of Applied Physics*, **2008**, 104, 063304	2.5	89
338	Advanced characterization methods for wear resistant hard coatings: A review on recent progress. *Surface and Coatings Technology*, **2016**, 285, 31-46	4.4	88
337	X-ray nanodiffraction reveals strain and microstructure evolution in nanocrystalline thin films. *Scripta Materialia*, **2012**, 67, 748-751	5.6	88
336	Low-stress superhard Ti?B films prepared by magnetron sputtering. *Surface and Coatings Technology*, **2003**, 174-175, 744-753	4.4	85
335	Influence of oxide phase formation on the tribological behaviour of TiAlVN coatings. *Surface and Coatings Technology*, **2005**, 200, 1731-1737	4.4	83
334	Abrasive wear of high speed steels: Influence of abrasive particles and primary carbides on wear resistance. *Tribology International*, **2003**, 36, 765-770	4.9	80
333	Industrial applications of PACVD hard coatings. *Surface and Coatings Technology*, **2003**, 163-164, 716-722	4.4	76
332	Non-reactively sputtered TiN and TiB2 films: influence of activation energy on film growth. *Surface and Coatings Technology*, **1997**, 97, 567-573	4.4	75

331	Structure–property relations of arc-evaporated AlCrSiN coatings. *Surface and Coatings Technology*, **2008**, 202, 3555-3562	4.4	73
330	Finite element simulation of the effect of surface roughness on nanoindentation of thin films with spherical indenters. *Surface and Coatings Technology*, **2007**, 202, 1103-1107	4.4	69
329	High-Temperature Tribological Behavior of CrN-Ag Self-lubricating Coatings. *Advanced Engineering Materials*, **2006**, 8, 1125-1129	3.5	69
328	The effect of oxide-forming alloying elements on the high temperature wear of a hot work steel. *Wear*, **2005**, 258, 1491-1499	3.5	67
327	Improved oxidation resistance of TiAlN coatings by doping with Si or B. *Surface and Coatings Technology*, **2009**, 203, 3104-3110	4.4	64
326	Mechanical Size-Effects in Miniaturized and Bulk Materials. *Advanced Engineering Materials*, **2006**, 8, 1033-1045	3.5	64
325	High-temperature low-friction properties of vanadium-alloyed AlCrN coatings. *Tribology Letters*, **2006**, 23, 101-107	2.8	64
324	Multifunctional multi-component PVD coatings for cutting tools. *Surface and Coatings Technology*, **2005**, 200, 1867-1871	4.4	64
323	Age hardening of PACVD TiBN thin films. *Scripta Materialia*, **2005**, 53, 241-245	5.6	64
322	Microstructure and properties of nitride and diboride hard coatings deposited under intense mild-energy ion bombardment. *Surface and Coatings Technology*, **1999**, 116-119, 133-140	4.4	64
321	Nanoporous activated carbon cloth as a versatile material for hydrogen adsorption, selective gas separation and electrochemical energy storage. *Nano Energy*, **2017**, 40, 49-64	17.1	63
320	Annealing of intrinsic stresses in sputtered TiN films: The role of thickness-dependent gradients of point defect density. *Surface and Coatings Technology*, **2007**, 201, 4777-4780	4.4	62
319	The influence of bias voltage on structure and mechanical/tribological properties of arc evaporated TiAlVN coatings. *Surface and Coatings Technology*, **2007**, 202, 1050-1054	4.4	62
318	Cathodic arc deposition of (Al,Cr)2O3: Macroparticles and cathode surface modifications. *Surface and Coatings Technology*, **2011**, 206, 1454-1460	4.4	61
317	Size effect of thermal expansion and thermal/intrinsic stresses in nanostructured thin films: Experiment and model. *Acta Materialia*, **2011**, 59, 6631-6645	8.4	61
316	Nanocrystalline hard coatings within the quasi-binary system TiN–TiB2. *Vacuum*, **1998**, 50, 313-318	3.7	61
315	Low-friction TiN coatings deposited by PACVD. *Surface and Coatings Technology*, **2003**, 163-164, 451-456	4.4	61
314	TiAlN based nanoscale multilayer coatings designed to adapt their tribological properties at elevated temperatures. *Thin Solid Films*, **2005**, 485, 160-168	2.2	61

313	The Beneficial Effect of High-Temperature Oxidation on the Tribological Behaviour of V and VN Coatings. *Tribology Letters*, **2007**, 28, 1-7	2.8	60
312	Hard coatings produced by PACVD applied to aluminium die casting. *Surface and Coatings Technology*, **1999**, 116-119, 530-536	4.4	60
311	On the effect of Ta on improved oxidation resistance of TiAlTaN coatings. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2009**, 27, 554-560	2.9	58
310	Structure–property relations in ZrCN coatings for tribological applications. *Surface and Coatings Technology*, **2010**, 205, 2134-2141	4.4	58
309	Structure and properties of TiB2 based coatings prepared by unbalanced DC magnetron sputtering. *Surface and Coatings Technology*, **1998**, 98, 1483-1489	4.4	58
308	Arc Evaporation of TiAlTaN Coatings: The Effect of Bias Voltage and Ta on High-temperature Tribological Properties. *Tribology Letters*, **2008**, 30, 91-97	2.8	56
307	Oxidation of arc-evaporated Al1−xCrxN coatings. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2007**, 25, 711-720	2.9	56
306	Nanocomposite TiBN coatings synthesized by reactive arc evaporation. *Acta Materialia*, **2006**, 54, 4193-4200	2.4	56
305	Sputter deposition of wear-resistant coatings within the system Zr?B?N. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1991**, 140, 670-675	5.3	54
304	The effect of droplets in arc evaporated TiAlTaN hard coatings on the wear behavior. *Surface and Coatings Technology*, **2014**, 257, 95-101	4.4	53
303	The effect of deposition temperature on microstructure and properties of thermal CVD TiN coatings. *International Journal of Refractory Metals and Hard Materials*, **2008**, 26, 120-126	4.1	53
302	Structure–property relations in CrC/a-C:H coatings deposited by reactive magnetron sputtering. *Surface and Coatings Technology*, **2005**, 200, 1147-1150	4.4	53
301	3D versus 2D finite element simulation of the effect of surface roughness on nanoindentation of hard coatings. *Surface and Coatings Technology*, **2009**, 203, 3286-3290	4.4	52
300	Tribological Properties of TiN/Ag Nanocomposite Coatings. *Tribology Letters*, **2008**, 30, 53-60	2.8	52
299	Self-Organized Nanostructures in Hard Ceramic Coatings. *Advanced Engineering Materials*, **2005**, 7, 1071-1082	3.9	52
298	Thermal decomposition routes of CrN hard coatings synthesized by reactive arc evaporation and magnetron sputtering. *Thin Solid Films*, **2008**, 517, 568-574	2.2	51
297	Microstructural aspects determining the adhesive wear of tool steels. *Wear*, **2006**, 260, 1028-1034	3.5	50
296	Annealing studies of nanocomposite TiSiC thin films with respect to phase stability and tribological performance. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 429, 90-95	5.3	49

295	X-ray nanodiffraction reveals stress distribution across an indented multilayered CrN□r thin film. *Acta Materialia*, **2015**, 85, 24-31	8.4	48
294	Origins of microstructure and stress gradients in nanocrystalline thin films: The role of growth parameters and self-organization. *Acta Materialia*, **2013**, 61, 6255-6266	8.4	48
293	Grain boundary design of thin films: Using tilted brittle interfaces for multiple crack deflection toughening. *Acta Materialia*, **2017**, 122, 130-137	8.4	48
292	Structural and mechanical properties of dc and pulsed dc reactive magnetron sputtered V2O5films. *Journal Physics D: Applied Physics*, **2007**, 40, 7716-7719	3	48
291	A transmission electron microscopy study on sputtered Zr?B and Zr?B?N films. *Thin Solid Films*, **1991**, 201, 123-135	2.2	48
290	Co-sputtered films within the quasi-binary system TiN-TiB2. *Surface and Coatings Technology*, **1997**, 94-95, 297-302	4.4	47
289	A novel approach for determining fracture toughness of hard coatings on the micrometer scale. *Scripta Materialia*, **2012**, 67, 708-711	5.6	46
288	The effect of increasing V content on structure, mechanical and tribological properties of arc evaporated TiAlVN coatings. *International Journal of Refractory Metals and Hard Materials*, **2009**, 27, 502-506	4.1	45
287	Structure-hardness relations in sputtered TiAlVN films. *Thin Solid Films*, **2003**, 444, 189-198	2.2	45
286	Radio-frequency sputter deposition of boron nitride based thin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1989**, 7, 2646-2651	2.9	45
285	Thermally induced self-hardening of nanocrystalline TiBN thin films. *Journal of Applied Physics*, **2006**, 100, 044301	2.5	44
284	Structure and stability of phases within the NbNAlN system. *Journal Physics D: Applied Physics*, **2010**, 43, 145403	3	43
283	Fracture toughness enhancement of brittle nanostructured materials by spatial heterogeneity: A micromechanical proof for CrN/Cr and TiN/SiOx multilayers. *Materials and Design*, **2016**, 104, 227-234	8.1	43
282	Thermal stability of nanocomposite CrC/a-C:H thin films. *Thin Solid Films*, **2007**, 515, 5411-5417	2.2	42
281	Structure of sputtered nanocomposite CrC[sub x]-C:H thin films. *Journal of Vacuum Science & Technology B*, **2006**, 24, 1837		42
280	Microstructure, mechanical and tribological properties of PACVD Ti(B,N) and TiB2 coatings. *Surface and Coatings Technology*, **2003**, 174-175, 1229-1233	4.4	42
279	Sputter deposition of decorative boride coatings. *Vacuum*, **1995**, 46, 1281-1294	3.7	42
278	Finite element study of the influence of hard coatings on hard metal tool loading during milling. *Surface and Coatings Technology*, **2016**, 304, 134-141	4.4	41

277	The influence of the ion bombardment on the optical properties of TiNx and ZrNx coatings. *Surface and Coatings Technology*, **1998**, 108-109, 230-235	4.4	41
276	Corrosion of zirconium boride and zirconium boron nitride coated steels. *Surface and Coatings Technology*, **1995**, 71, 60-66	4.4	40
275	Electrodeposited Nanostructured CoFe2O4 for Overall Water Splitting and Supercapacitor Applications. *Catalysts*, **2019**, 9, 176	4	40
274	Influence of Al and Si content on structure and mechanical properties of arc evaporated AlCrSiN thin films. *Thin Solid Films*, **2013**, 534, 403-409	2.2	39
273	In-situ Observation of Cross-Sectional Microstructural Changes and Stress Distributions in Fracturing TiN Thin Film during Nanoindentation. *Scientific Reports*, **2016**, 6, 22670	4.9	38
272	Self-organized periodic soft-hard nanolamellae in polycrystalline TiAlN thin films. *Thin Solid Films*, **2013**, 545, 29-32	2.2	38
271	Texture development in polycrystalline CrN coatings: the role of growth conditions and a Cr interlayer. *Journal Physics D: Applied Physics*, **2009**, 42, 075401	3	38
270	Structure–property–performance relations of high-rate reactive arc-evaporated TiBN nanocomposite coatings. *Surface and Coatings Technology*, **2006**, 201, 2553-2559	4.4	38
269	Hardness evolution of AlCrN coatings under thermal load. *Journal of Materials Research*, **2008**, 23, 2880-2885	2.5	36
268	High-temperature tribological behaviour of sputtered NbNx thin films. *Surface and Coatings Technology*, **2007**, 202, 1017-1022	4.4	36
267	Characterization of tribo-layers on self-lubricating plasma-assisted chemical-vapor-deposited TiN coatings. *Thin Solid Films*, **2004**, 460, 125-132	2.2	36
266	The electro-mechanical behavior of sputter-deposited Mo thin films on flexible substrates. *Thin Solid Films*, **2016**, 606, 45-50	2.2	36
265	30 nm X-ray focusing correlates oscillatory stress, texture and structural defect gradients across multilayered TiN-SiOx thin film. *Acta Materialia*, **2018**, 144, 862-873	8.4	36
264	Oxidation behaviour and tribological properties of arc-evaporated ZrAlN hard coatings. *Surface and Coatings Technology*, **2012**, 206, 2337-2345	4.4	35
263	Fatigue properties of Ti-based hard coatings deposited onto tool steels. *Surface and Coatings Technology*, **2001**, 142-144, 117-124	4.4	35
262	Microstructure and mechanical properties of CVD TiN/TiBN multilayer coatings. *Surface and Coatings Technology*, **2019**, 370, 311-319	4.4	34
261	Tribological properties of Al2O3 hard coatings modified by mechanical blasting and polishing post-treatment. *Wear*, **2012**, 289, 9-16	3.5	34
260	Thermal stability of magnetron sputtered ZrSiN films. *Surface and Coatings Technology*, **2006**, 201, 3368-3376	4.4	34

259	Recrystallization and grain growth of nanocomposite TiBN coatings. *Thin Solid Films*, **2003**, 440, 174-179	2.2	34
258	Sputtered molybdenum films: Structure and property evolution with film thickness. *Vacuum*, **2014**, 99, 149-152	3.7	33
257	Influence of phase transition on the tribological performance of arc-evaporated AlCrVN hard coatings. *Surface and Coatings Technology*, **2009**, 203, 1101-1105	4.4	33
256	Al-rich cubic Al0.8Ti0.2N coating with self-organized nano-lamellar microstructure: Thermal and mechanical properties. *Surface and Coatings Technology*, **2016**, 291, 89-93	4.4	32
255	Few-layer graphene-like flakes derived by plasma treatment: A potential material for hydrogen adsorption and storage. *Microporous and Mesoporous Materials*, **2016**, 225, 482-487	5.3	32
254	The nanostructure, wear and corrosion performance of arc-evaporated CrBxNy nanocomposite coatings. *Surface and Coatings Technology*, **2009**, 204, 246-255	4.4	32
253	PACVD TiN/TiBN multilayers: from micro- to nano-scale. *Surface and Coatings Technology*, **2004**, 177-178, 348-354	4.4	32
252	Cross-sectional structure-property relationship in a graded nanocrystalline Ti1−xAlxN thin film. *Acta Materialia*, **2016**, 102, 212-219	8.4	31
251	Seed layer stimulated growth of crystalline high Al containing (Al,Cr)2O3 coatings deposited by cathodic arc evaporation. *Thin Solid Films*, **2014**, 550, 95-104	2.2	31
250	Microstructure and thermal stability of corundum-type (Al0.5Cr0.5)2O3 solid solution coatings grown by cathodic arc evaporation. *Thin Solid Films*, **2013**, 534, 373-379	2.2	31
249	Effect of nitrogen-incorporation on structure, properties and performance of magnetron sputtered CrB2. *Surface and Coatings Technology*, **2008**, 202, 3088-3093	4.4	31
248	Hard and superhard nanocomposite AlCuN films prepared by magnetron sputtering. *Surface and Coatings Technology*, **2001**, 142-144, 603-609	4.4	31
247	Origin of temperature-induced low friction of sputtered Si-containing amorphous carbon coatings. *Acta Materialia*, **2015**, 82, 437-446	8.4	30
246	Comparative study of Ti1−xAlxN coatings alloyed with Hf, Nb, and B. *Surface and Coatings Technology*, **2005**, 200, 113-117	4.4	30
245	Residual stress gradients in α-Al2O3 hard coatings determined by pencil-beam X-ray nanodiffraction: The influence of blasting media. *Surface and Coatings Technology*, **2015**, 262, 134-140	4.4	29
244	Tribological Properties of Reactive Magnetron Sputtered V2O5 and VN/V2O5 Coatings. *Tribology Letters*, **2008**, 30, 21-26	2.8	29
243	Tribological behavior of PACVD TiN coatings in the temperature range up to 500 °C. *Surface and Coatings Technology*, **2003**, 163-164, 585-590	4.4	29
242	Nanocomposite coatings within the system TiBN deposited by plasma assisted chemical vapor deposition. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 1084		29

241	Thickness dependence of the electro-mechanical response of sputter-deposited Mo thin films on polyimide: Insights from in situ synchrotron diffraction tensile tests. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 697, 17-23	5.3	28
240	Cu diffusion in single-crystal and polycrystalline TiN barrier layers: A high-resolution experimental study supported by first-principles calculations. *Journal of Applied Physics*, **2015**, 118, 085307	2.5	28
239	Lateral gradients of phases, residual stress and hardness in a laser heated TiAlN coating on hard metal. *Surface and Coatings Technology*, **2012**, 206, 4502-4510	4.4	28
238	Microstructure–property relations of reactively magnetron sputtered VCxNy films. *Surface and Coatings Technology*, **2011**, 205, 3805-3809	4.4	28
237	Stress evolution in CrN/Cr coating systems during thermal straining. *Thin Solid Films*, **2008**, 516, 1972-1976	2.2	28
236	Synthesis of nanoporous graphene oxide adsorbents by freeze-drying or microwave radiation: Characterization and hydrogen storage properties. *International Journal of Hydrogen Energy*, **2015**, 40, 6844-6852	6.7	27
235	Investigation of the origin of compressive residual stress in CVD TiB 2 hard coatings using synchrotron X-ray nanodiffraction. *Surface and Coatings Technology*, **2014**, 258, 121-126	4.4	27
234	Nanoindentation of chemical-vapor deposited Al2O3 hard coatings at elevated temperatures. *Thin Solid Films*, **2015**, 578, 20-24	2.2	27
233	Structural and mechanical properties of diamond-like carbon films deposited by an anode layer source. *Thin Solid Films*, **2009**, 517, 6502-6507	2.2	27
232	Experimental studies on epitaxially grown TiN and VN films. *Thin Solid Films*, **2007**, 516, 369-373	2.2	27
231	Plasma-assisted pre-treatment for PACVD TiN coatings on tool steel. *Surface and Coatings Technology*, **2003**, 174-175, 687-693	4.4	27
230	High-temperature tribology and oxidation of Ti1−yAlxTayN hard coatings. *Surface and Coatings Technology*, **2018**, 342, 190-197	4.4	26
229	Cross-sectional X-ray nanobeam diffraction analysis of a compositionally graded CrNx thin film. *Thin Solid Films*, **2013**, 542, 1-4	2.2	26
228	CO addition in low-pressure chemical vapour deposition of medium-temperature TiCxN1-x based hard coatings. *Surface and Coatings Technology*, **2011**, 206, 1691-1697	4.4	26
227	Structure, mechanical properties and oxidation behaviour of arc-evaporated NbAlN hard coatings. *Surface and Coatings Technology*, **2010**, 204, 2447-2453	4.4	26
226	Synthesis–structure–property relations for CrBN coatings sputter deposited reactively from a CrB target with 20at% B. *Vacuum*, **2008**, 82, 771-776	3.7	26
225	Formation mechanisms of low-friction tribo-layers on arc-evaporated TiC1−xNx hard coatings. *Wear* , **2008**, 265, 525-532	3.5	26
224	Structural investigations of aluminum-chromium-nitride hard coatings by Raman micro-spectroscopy. *Thin Solid Films*, **2006**, 515, 2197-2202	2.2	26

223	Structure evolution in reactively sputtered molybdenum oxide thin films. *Vacuum*, **2016**, 131, 246-251	3.7	26
222	Sputtered Si-containing low-friction carbon coatings for elevated temperatures. *Tribology International*, **2014**, 77, 15-23	4.9	25
221	Micro- and bonding structure of arc-evaporated AlCrVN hard coatings. *Thin Solid Films*, **2008**, 516, 6151-6157	2.1	25
220	Investigations on the effects of plasma-assisted pre-treatment for plasma-assisted chemical vapour deposition TiN coatings on tool steel. *Thin Solid Films*, **2004**, 461, 277-281	2.2	25
219	Phase composition and thermal stability of arc evaporated Ti 1− Al x N hard coatings with 0.4 x 0.67. *Surface and Coatings Technology*, **2017**, 309, 687-693	4.4	24
218	Thermal stability of doped CVD Al2O3 coatings. *Surface and Coatings Technology*, **2010**, 204, 3713-3722	4.4	24
217	Abrasive and Adhesive Wear Behavior of Arc-Evaporated Al1− Cr x N Hard Coatings. *Tribology Letters*, **2010**, 37, 605-611	2.8	24
216	X-ray diffraction analysis of three-dimensional residual stress fields reveals origins of thermal fatigue in uncoated and coated steel. *Scripta Materialia*, **2010**, 62, 774-777	5.6	24
215	Substrate and coating damage by arcing during sputtering. *Surface and Coatings Technology*, **1997**, 89, 233-238	4.4	24
214	The influence of boron content on the tribological performance of TiNB coatings prepared by thermal CVD. *Surface and Coatings Technology*, **2006**, 201, 4247-4252	4.4	24
213	Interfaces in nanostructured thin films and their influence on hardness. *International Journal of Materials Research*, **2005**, 96, 468-480		24
212	Influence of residual stresses and grain size on the spinodal decomposition of metastable Ti1−AlxN coatings. *Surface and Coatings Technology*, **2012**, 209, 190-196	4.4	23
211	Elastic constants of fibre-textured thin films determined by X-ray diffraction. *Journal of Applied Crystallography*, **2009**, 42, 416-428	3.8	23
210	Titanium doped CVD alumina coatings. *Surface and Coatings Technology*, **2008**, 203, 350-356	4.4	23
209	Surface chemical changes induced by low-energy ion bombardment in chromium nitride layers. *Surface and Interface Analysis*, **2002**, 34, 740-743	1.5	23
208	Effects of thermal annealing on the microstructure of sputtered Al2O3 coatings. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2011**, 29, 041506	2.9	22
207	Interlayer thickness influence on the tribological response of bi-layer coatings. *Tribology International*, **2010**, 43, 108-112	4.9	22
206	Evolution of structure and residual stress of a fcc/hex-AlCrN multi-layered system upon thermal loading revealed by cross-sectional X-ray nano-diffraction. *Acta Materialia*, **2019**, 162, 55-66	8.4	22

205	Influence of pulsed bias duty cycle variations on structural and mechanical properties of arc evaporated (Al,Cr)2O3 coatings. *Surface and Coatings Technology*, **2015**, 282, 43-51	4.4	21
204	Influence of surface topography on early stages on steel galling of coated WC-Co hard metals. *International Journal of Refractory Metals and Hard Materials*, **2016**, 57, 24-30	4.1	21
203	Dry-Blasting of □and □Al2O3 CVD Hard Coatings: Friction Behaviour and Thermal Stress Relaxation. *Tribology Letters*, **2013**, 52, 147-154	2.8	21
202	TiO2(100)/Al2O3(0001) interface: A first-principles study supported by experiment. *Physical Review B*, **2012**, 86,	3.3	21
201	Residual stresses and thermal fatigue in CrN hard coatings characterized by high-temperature synchrotron X-ray diffraction. *Thin Solid Films*, **2010**, 518, 2090-2096	2.2	21
200	Influence of different atmospheres on the thermal decomposition of Al-Cr-N coatings. *Journal Physics D: Applied Physics*, **2008**, 41, 155316	3	21
199	Synthesis□tructure relations for reactive magnetron sputtered V2O5 films. *Surface and Coatings Technology*, **2008**, 202, 1551-1555	4.4	21
198	Intrinsic stresses and stress relaxation in TiN/Ag multilayer coatings during thermal cycling. *Thin Solid Films*, **2008**, 516, 1920-1924	2.2	21
197	Corrosion characteristics of plain carbon steel coated with TiN and ZrN under high-flux ion bombardment. *Surface and Coatings Technology*, **2002**, 160, 82-86	4.4	21
196	Morphology and Microstructure of Hard and Superhard Zr□Cu□N Nanocomposite Coatings. *Japanese Journal of Applied Physics*, **2002**, 41, 6529-6533	1.4	21
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