Christoph Leyens

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3298601/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Multimaterial Additive Manufacturing of Graded Laves Phase Reinforced NiAlTa Structures by Means of Laser Metal Deposition. Advanced Engineering Materials, 2022, 24, 2100993.	3.5	1
2	NDE for Additive Manufacturing. , 2022, , 665-696.		1
3	Contemporary Materials Issues for Advanced EB-PVD Thermal Barrier Coating Systems. International Journal of Materials Research, 2022, 92, 762-772.	0.3	4
4	Characterization of the high-temperature behavior of PBF-EB/M manufactured γÂtitanium aluminides. Progress in Additive Manufacturing, 2022, 7, 471-480.	4.8	14
5	Defect-based characterization of the fatigue behavior of additively manufactured titanium aluminides. International Journal of Fatigue, 2022, 163, 107047.	5.7	10
6	Erosion behavior of CMAS/VA infiltrated EB-PVD Gd2Zr2O7 TBCs: Special emphasis on the effect of mechanical properties of the reaction products. Wear, 2022, 506-507, 204450.	3.1	1
7	Improving and monitoring the magnetic pulse welding process between dissimilar metals. Welding in the World, Le Soudage Dans Le Monde, 2021, 65, 199-209.	2.5	7
8	In situ observation with x-ray for tentative exploration of laser beam welding processes for aluminum-based alloys. Journal of Laser Applications, 2021, 33, 012026.	1.7	8
9	Integration of pure copper to optimize heat dissipation in injection mould inserts using laser metal deposition. Journal of Laser Applications, 2021, 33, 012029.	1.7	6
10	Additive Manufacturing of Titanium with Different Surface Structures for Adhesive Bonding and Thermal Direct Joining with Fiber-Reinforced Polyether-Ether-Ketone (PEEK) for Lightweight Design Applications. Metals, 2021, 11, 265.	2.3	13
11	Laser fusion cutting: evaluation of gas boundary layer flow state, momentum and heat transfer. Materials Research Express, 2021, 8, 036513.	1.6	9
12	Additive Manufacturing of \hat{I}^2 -NiAl by Means of Laser Metal Deposition of Pre-Alloyed and Elemental Powders. Materials, 2021, 14, 2246.	2.9	6
13	Extension of the process limits in laser beam welding of thick-walled components using the Laser Multi-Pass Narrow-Gap welding (Laser-MPNG) on the example of the nickel-based material Alloy 617 occ. Welding in the World, Le Soudage Dans Le Monde, 2021, 65, 1359-1371.	2.5	6
14	A study on hot-working as alternative post-processing method for titanium aluminides built by laser powder bed fusion and electron beam melting. Journal of Materials Processing Technology, 2021, 291, 117024.	6.3	27
15	Physical and Geometrical Properties of Additively Manufactured Pure Copper Samples Using a Green Laser Source. Materials, 2021, 14, 3642.	2.9	29
16	Improved corrosion behavior of a novel Fe85Cr4Mo8V2C1 tool steel processed by laser powder bed fusion. Journal of Alloys and Compounds, 2021, 867, 158887.	5.5	3
17	Development of a System for Additive Manufacturing of Ceramic Matrix Composite Structures Using Laser Technology. Materials, 2021, 14, 3248.	2.9	2
18	Electron Beam Powder Bed Fusion of γ-Titanium Aluminide: Effect of Processing Parameters on Part Density, Surface Characteristics, and Aluminum Content. Metals, 2021, 11, 1093.	2.3	8

#	Article	IF	CITATIONS
19	In Situ CT Tensile Testing of an Additively Manufactured and Heat-Treated Metastable ß-Titanium Alloy (Ti-5Al-5Mo-5V-3Cr). Applied Sciences (Switzerland), 2021, 11, 9875.	2.5	3
20	Laser processing: solutions for industry. PhotonicsViews, 2021, 18, 32-36.	0.1	2
21	Investigation of CMAS Resistance of Sacrificial Suspension Sprayed Alumina Topcoats on EB-PVD 7YSZ Layers. Journal of Thermal Spray Technology, 2020, 29, 90-104.	3.1	8
22	Comprehensive study on the formation of grain boundary serrations in additively manufactured Haynes 230 alloy. Materials Characterization, 2020, 160, 110092.	4.4	15
23	Potential and challenges of additive manufacturing for topology optimized spacecraft structures. Journal of Laser Applications, 2020, 32, .	1.7	15
24	Investigation on the formation of grain boundary serrations in additively manufactured superalloy Haynes 230. Journal of Laser Applications, 2020, 32, .	1.7	7
25	Alloy Design and Microstructure Evolution in the AlxCoCrFeNi Alloy System Synthesized by Laser Metal Deposition. Frontiers in Materials, 2020, 7, .	2.4	13
26	Interface Formation during Collision Welding of Aluminum. Metals, 2020, 10, 1202.	2.3	13
27	Strain Monitoring During Laser Metal Deposition of Inconel 718 by Neutron Diffraction. Minerals, Metals and Materials Series, 2020, , 1033-1045.	0.4	4
28	Particle Ejection by Jetting and Related Effects in Impact Welding Processes. Metals, 2020, 10, 1108.	2.3	14
29	Image-based algorithm for nozzle adhesion detection in powder-fed directed-energy deposition. Journal of Laser Applications, 2020, 32, 022021.	1.7	2
30	Comparative analysis of the potential of state-of-the-art lasers and new prototypic high-power beam sources for cutting nonmetals. Journal of Laser Applications, 2020, 32, 022040.	1.7	1
31	Fast Beam Oscillations Improve Laser Cutting of Thick Materials. PhotonicsViews, 2020, 17, 26-31.	0.1	3
32	Novel local shielding approach for the laser welding based additive manufacturing of large structural space components from titanium. Journal of Laser Applications, 2020, 32, 022075.	1.7	9
33	Comparison of dimensional accuracy and tolerances of powder bed based and nozzle based additive manufacturing processes. Journal of Laser Applications, 2020, 32, .	1.7	50
34	Hybrid manufacturing of titanium Ti-6Al-4V combining laser metal deposition and cryogenic milling. International Journal of Advanced Manufacturing Technology, 2020, 107, 2995-3009.	3.0	29
35	Magneto-structural correlations in a systematically disordered B2 lattice. New Journal of Physics, 2020, 22, 073004.	2.9	14
36	A Study on the accuracy of Thermography-based Temperature measurement in Powder-fed directed energy deposition. Procedia CIRP, 2020, 95, 35-41.	1.9	2

#	Article	IF	CITATIONS
37	Novel Approach for Suppressing of Hot Cracking Via Magneto-fluid Dynamic Modification of the Laser-Induced Marangoni Convection. Minerals, Metals and Materials Series, 2020, , 972-981.	0.4	1
38	Material Characterization of AISI 316L Flexure Pivot Bearings Fabricated by Additive Manufacturing. Materials, 2019, 12, 2426.	2.9	10
39	Microstructural, mechanical, and thermo-physical characterization of hypereutectic AlSi40 fabricated by selective laser melting. Journal of Laser Applications, 2019, 31, .	1.7	15
40	Laser-multi-pass-narrow-gap-welding of nickel superalloy—Alloy 617OCC. Journal of Laser Applications, 2019, 31, .	1.7	3
41	Surface modification of additively manufactured gamma titanium aluminide hardware. Journal of Laser Applications, 2019, 31, 022517.	1.7	1
42	Fast Laser Cutting of Thin Metal. Procedia Manufacturing, 2019, 29, 369-374.	1.9	15
43	The role of open-volume defects in the annihilation of antisites in a B2-ordered alloy. Acta Materialia, 2019, 176, 167-176.	7.9	14
44	Functional integration approaches via laser powder bed processing. Journal of Laser Applications, 2019, 31, 022319.	1.7	2
45	Advanced manufacturing approach via the combination of selective laser melting and laser metal deposition. Journal of Laser Applications, 2019, 31, 022317.	1.7	6
46	Efficient separation of battery materials using remote laser cutting–high output performance, contour flexibility, and cutting edge quality. Journal of Laser Applications, 2019, 31, .	1.7	8
47	Wavelength dependent laser material processing of ceramic materials. Journal of Laser Applications, 2019, 31, .	1.7	1
48	Special Section "Light Materials â^' Science and Technology― Advanced Engineering Materials, 2019, 21, 1900232.	3.5	0
49	Intrinsic Heat Treatment Within Additive Manufacturing of Gamma Titanium Aluminide Space Hardware. Jom, 2019, 71, 1513-1519.	1.9	22
50	High strength and ductility of electron beam melted β stabilized γ-TiAl alloy at 800°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 41-45.	5.6	30
51	Laser Multi-Pass Narrow-Gap Welding – A Promising Technology for Joining Thick-Walled Components of Future Power Plants. MATEC Web of Conferences, 2019, 269, 02011.	0.2	6
52	Analysis of Melt Pool Characteristics and Process Parameters Using a Coaxial Monitoring System during Directed Energy Deposition in Additive Manufacturing. Materials, 2019, 12, 308.	2.9	36
53	Erosion resistance of CMAS infiltrated sacrificial suspension sprayed alumina top layer on EB-PVD 7YSZ coatings. Wear, 2019, 438-439, 203064.	3.1	7
54	Laser Treatment as Sintering Process for Dispenser Printed Bismuth Telluride Based Paste. Materials, 2019, 12, 3453.	2.9	3

#	Article	IF	CITATIONS
55	A Printable Paste Based on a Stable n-Type Poly[Ni-tto] Semiconducting Polymer. Coatings, 2019, 9, 764.	2.6	2
56	Thermodynamic calculation and experimental analysis of critical phase transformations in HVOF-sprayed NiCrAlY-coating alloys. Surface and Coatings Technology, 2019, 357, 924-938.	4.8	11
57	Additive manufacturing of an AlSi40 mirror coated with electroless nickel for cryogenic space applications. , 2019, , .		5
58	Phenomena in multi-material fabrication using laser metal deposition. , 2019, , .		0
59	Solid particle erosion behavior of nanolaminated Cr 2 AlC films. Wear, 2018, 402-403, 187-195.	3.1	30
60	The oxidation behaviour of aluminium-rich coatings on the TiAl alloy TNM-B1. Materials at High Temperatures, 2018, 35, 204-216.	1.0	3
61	Mechanical Properties of Metal Oxide Aerogels. Chemistry of Materials, 2018, 30, 145-152.	6.7	49
62	Coaxial Laser Wire Deposition. Journal of Physics: Conference Series, 2018, 1109, 012026.	0.4	9
63	Investigations on clean and efficient remote cutting and ablating processes. Procedia CIRP, 2018, 74, 413-416.	1.9	1
64	Evaluation of 3D-printed parts by means of high-performance computer tomography. Journal of Laser Applications, 2018, 30, 032307.	1.7	13
65	Efficient air flow control for remote laser beam welding. Journal of Laser Applications, 2018, 30, 032413.	1.7	3
66	Erosion behavior of EB-PVD 7YSZ coatings under corrosion/erosion regime: Effect of TBC microstructure and the CMAS chemistry. Journal of the European Ceramic Society, 2018, 38, 5101-5112.	5.7	29
67	Method for high accuracy measurements of energy coupling and melting efficiency under welding conditions. Journal of Laser Applications, 2018, 30, .	1.7	8
68	Enhanced manufacturing possibilities using multi-materials in laser metal deposition. Journal of Laser Applications, 2018, 30, .	1.7	36
69	Added value by hybrid additive manufacturing and advanced manufacturing approaches. Journal of Laser Applications, 2018, 30, .	1.7	10
70	Additive Manufacturing of Powdery Ni-Based Superalloys Mar-M-247 and CM 247 LC in Hybrid Laser Metal Deposition. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3812-3830.	2.2	30
71	Polyethenetetrathiolate or polytetrathiooxalate? Improved synthesis, a comparative analysis of a prominent thermoelectric polymer and implications to the charge transport mechanism. Polymer Chemistry, 2018, 9, 4543-4555.	3.9	18

Hybrid Additive Manufacturing of Gamma Titanium Aluminide Space Hardware. , 2018, , .

1

#	Article	IF	CITATIONS
73	Process characteristics in high-precision laser metal deposition using wire and powder. Journal of Laser Applications, 2017, 29, .	1.7	25
74	Facile synthesis of potassium tetrathiooxalate – The "true―monomer for the preparation of electron-conductive poly(nickel-ethylenetetrathiolate). Tetrahedron, 2017, 73, 2250-2254.	1.9	22
75	Thermal operating window for PEDOT:PSS films and its related thermoelectric properties. Synthetic Metals, 2017, 225, 49-54.	3.9	32
76	Hybrid laser manufacturing. , 2017, , 79-97.		1
77	Thermocyclic Boroaluminizing of Low Carbon Steels in Pastes. Materials Performance and Characterization, 2017, 6, 531-545.	0.3	3
78	Die Leichtbauwerkstoffe für den Fahrzeugbau. , 2017, , 205-449.		2
79	Mechanical Properties of Sharkâ€5kin Like Structured Surfaces for Highâ€Temperature Applications. Advanced Engineering Materials, 2016, 18, 688-702.	3.5	7
80	Laser-based manufacturing of components using materials with high cracking susceptibility. Journal of Laser Applications, 2016, 28, 022305.	1.7	8
81	Magnetic properties of bulk and thin film Cr–Al–C compounds. Surface Engineering, 2016, 32, 172-177.	2.2	10
82	Reducing the erosive wear rate of Cr2AlC MAX phase ceramic by oxidative healing of local impact damage. Wear, 2016, 358-359, 1-6.	3.1	20
83	Hard Turning of Hot Work and Cold Work Steels with HiPIMS and DCMS TiAlN Coated Carbide Inserts. Procedia CIRP, 2016, 46, 591-594.	1.9	8
84	DFG Priority Program SPP 1299 - Adaptive Surfaces for High-Temperature Applications - the Skin Concept. Advanced Engineering Materials, 2016, 18, 687-687.	3.5	2
85	Compositional depth profiling of diamond-like carbon layers by glow discharge optical emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2016, 31, 2207-2212.	3.0	9
86	Modular Coating for Flexible Gas Turbine Operation. Journal of Thermal Spray Technology, 2016, 25, 273-281.	3.1	1
87	Investigation of the Thermoelectric Power Factor of KOH-Treated PEDOT:PSS Dispersions for Printing Applications. Energy Harvesting and Systems, 2016, 3, 101-111.	2.7	38
88	Fabrication of Riblet Structures on a Niâ€based Superalloy (PWA1483) for Potential Drag Reduction in High Temperature Applications Based on Laser Optimization. Advanced Engineering Materials, 2015, 17, 1008-1016.	3.5	2
89	Laser Additive Manufacturing with Crack-sensitive Materials. Laser Technik Journal, 2015, 12, 28-30.	0.2	11
90	Demands, Potentials, and Economic Aspects of Thermal Spraying with Suspensions: A Critical Review. Journal of Thermal Spray Technology, 2015, 24, 1143-1152.	3.1	60

#	Article	IF	CITATIONS
91	High-performance laser cladding with combined energy sources. Journal of Laser Applications, 2015, 27, .	1.7	30
92	Characterization of Cr–Al–C and Cr–Al–C–Y films synthesized by High Power Impulse Magnetron Sputtering at a low deposition temperature. Thin Solid Films, 2015, 580, 6-11.	1.8	29
93	Electrodeposition of Co–Mn3O4 composite coatings. Surface and Coatings Technology, 2015, 280, 208-215.	4.8	21
94	Ambient effects on the electrical conductivity of carbon nanotubes. Carbon, 2015, 95, 347-353.	10.3	27
95	Innovations in laser cladding and direct laser metal deposition. , 2015, , 181-192.		21
96	Numerical and Experimental Sensitivity Analysis for the Determination of Casting Parameter–Microstructure–Property Relations and Mechanical Properties of IN738LC in Investment Casting. Advanced Engineering Materials, 2014, 16, 1217-1225.	3.5	1
97	Metal–Ceramic Layered Materials and Composites Manufactured Using Powder Techniques. Advanced Engineering Materials, 2014, 16, 1293-1302.	3.5	11
98	Highly n-doped Surfaces on n-type Silicon Wafers by Laser-chemical Processes. Energy Procedia, 2014, 55, 247-254.	1.8	6
99	Influence of thermocycle boroaluminising on strength of steel C30. Surface Engineering, 2014, 30, 129-133.	2.2	14
100	Optical absorption spectroscopy and properties of single walled carbon nanotubes at high temperature. Synthetic Metals, 2014, 197, 182-187.	3.9	17
101	HIPIMS COATED CARBIDES WITH HIGH ADHESIVE STRENGTH FOR HARD MACHINING. MM Science Journal, 2014, 2014, 516-520.	0.4	3
102	Surface Functionalization by High-precision Laser Cladding. Laser Technik Journal, 2013, 10, 29-31.	0.2	12
103	Oxidation resistance of γ-TiAl based alloy Ti–45Al–8Nb coated with intermetallic Ti–Al–Cr–Y layers and EB-PVD zirconia topcoats at 950°C in air. Surface and Coatings Technology, 2013, 222, 128-134.	4.8	40
104	Laser-based generation of precise functional structures and components. , 2013, , .		0
105	Laser-based fabrication with Ti- and Ni-base superalloys. , 2013, , .		1
106	Energy Turnaround: Printing of Thermoelectric Generators. IFIP Advances in Information and Communication Technology, 2013, , 181-184.	0.7	2
107	Innovations in laser cladding and direct metal deposition. Proceedings of SPIE, 2012, , .	0.8	10
108	Calculating the stress of multi-track formations in induction-assisted laser cladding. , 2012, , .		0

#	Article	IF	CITATIONS
109	Short-time Oxidation of Cast γ/γ′-Ni–Cr–Al–Ta–Re Alloys at 1,000°C. Oxidation of Metals, 2012, 7	78,2613-82.	3
110	Morphology, microstructure, and hardness of titanium (Ti-6Al-4V) blocks deposited by wire-feed additive layer manufacturing (ALM). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 532, 295-307.	5.6	255
111	Oxidation behaviour of a Ti2AlN MAX-phase coating. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082025.	0.6	6
112	Oxidation behaviour of Ti–Al–C films composed mainly of a Ti2AlC phase. Corrosion Science, 2011, 53, 2948-2955.	6.6	30
113	Mechanical Properties of Additive Manufactured Ti-6Al-4V Using Wire and Powder Based Processes. IOP Conference Series: Materials Science and Engineering, 2011, 26, 012004.	0.6	63
114	Deposition of Ti–6Al–4V using laser and wire, part II: Hardness and dimensions of single beads. Surface and Coatings Technology, 2011, 206, 1130-1141.	4.8	58
115	Deposition of Ti–6Al–4V using laser and wire, part I: Microstructural properties of single beads. Surface and Coatings Technology, 2011, 206, 1120-1129.	4.8	145
116	Mechanical properties of additive manufactured titanium (Ti–6Al–4V) blocks deposited by a solid-state laser and wire. Materials & Design, 2011, 32, 4665-4675.	5.1	184
117	Plasmachemisches Ätzen und Beschichten bei Atmosphäendruck. Vakuum in Forschung Und Praxis, 2011, 23, 12-16.	0.1	0
118	Oxidation Behaviour of Ti ₂ AlN Films Composed Mainly of Nanolaminated MAX Phase. Journal of Nanoscience and Nanotechnology, 2011, 11, 8959-8966.	0.9	10
119	Oxidation behaviour of TiAlYN/CrN and CrAlYN/CrN nanoscale multilayer coatings with Al2O3topcoat deposited on Î ³ -TiAl alloys. Materials at High Temperatures, 2011, 28, 324-335.	1.0	7
120	Oxidation and fatigue behaviour of γ-TiAl coated with HIPIMS CrAlYN/CrN nanoscale multilayer coatings and EB-PVD thermal barrier coatings. International Journal of Materials Research, 2010, 101, 648-656.	0.3	15
121	Fabrication and oxidation behavior of Cr2AlC coating on Ti6242 alloy. Surface and Coatings Technology, 2010, 204, 2343-2352.	4.8	88
122	Effect of roller burnishing on fatigue properties of the hot-rolled Mg–12Gd–3Y magnesium alloy. Materials Chemistry and Physics, 2010, 124, 835-840.	4.0	32
123	Selfâ€Healing Materials. Advanced Materials, 2010, 22, 5424-5430.	21.0	944
124	Shot peening on the high-strength wrought magnesium alloy AZ80—Effect of peening media. Journal of Materials Processing Technology, 2010, 210, 445-450.	6.3	51
125	Additive manufactured Ti-6Al-4V using welding wire: comparison of laser and arc beam deposition and evaluation with respect to aerospace material specifications. Physics Procedia, 2010, 5, 595-606.	1.2	269
126	Ti-Al-Cr Based Coatings for High Temperature Oxidation Protection of Î ³ -TiAl. Materials Science Forum, 2010, 638-642, 1306-1311.	0.3	7

#	Article	IF	CITATIONS
127	Oxidation behaviour of TiAl-based intermetallic coatings on Î ³ -TiAl alloys. International Journal of Materials Research, 2010, 101, 637-647.	0.3	23
128	Environmental protection of γ-TiAl based alloy Ti-45Al-8Nb by CrAlYN thin films and thermal barrier coatings. Intermetallics, 2010, 18, 479-486.	3.9	47
129	Influence of shot peening on notched fatigue strength of the high-strength wrought magnesium alloy AZ80. Journal of Alloys and Compounds, 2010, 497, 380-385.	5.5	25
130	Improving the high-temperature oxidation resistance of a β–γ TiAl alloy by a Cr2AlC coating. Corrosion Science, 2010, 52, 3793-3802.	6.6	45
131	Influence of different annealing processes under various atmospheres on the oxidation behaviour of Î ³ -TiAl. Materials at High Temperatures, 2009, 26, 91-97.	1.0	1
132	Oxidation-resistant Ti–90Al coatings with lotus effect surface morphology deposited on a γ-TiAl alloy. Scripta Materialia, 2009, 61, 1156-1159.	5.2	5
133	Mechanical properties of the hot-rolled Mg–12Gd–3Y magnesium alloy. Materials Chemistry and Physics, 2009, 118, 453-458.	4.0	17
134	Oxidation Behaviour of TBC Systems on γ-TiAl Based Alloy Ti–45Al–8Nb. Oxidation of Metals, 2009, 71, 295-318.	2.1	47
135	Thermally grown oxide scales on \hat{I}^3 -TiAl coated with thermal protection systems. Materials at High Temperatures, 2009, 26, 305-316.	1.0	13
136	Investigation on the oxidation behaviour of gamma titanium aluminides coated with thermal barrier coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 539-546.	1.5	19
137	Improvement of the Highâ€Temperature Oxidation Resistance of γâ€TiAl by Selectively Preâ€treated Siâ€based Coating. Advanced Engineering Materials, 2008, 10, 675-677.	3.5	6
138	Performance of thermal barrier coatings on \hat{I}^3 -TiAl. , 2008, , 249-263.		0
139	A Novel Canning Technology for Forging of Gamma-TiAl Alloys. Materials Science Forum, 2007, 546-549, 1421-1426.	0.3	1
140	Oxidation protective coatings for γâ€ī iAl – recent trends. Materialwissenschaft Und Werkstofftechnik, 2007, 38, 667-673.	0.9	20
141	Lifetimeâ€determining spalling mechanisms of NiCoCrAlRE / EBâ€PVD zirconia TBC systems. Materialwissenschaft Und Werkstofftechnik, 2007, 38, 734-746.	0.9	9
142	Oxidation behaviour of gamma titanium aluminides with EB-PVD thermal barrier coatings exposed to air at 900°C. Surface and Coatings Technology, 2007, 202, 676-680.	4.8	47
143	Oxidation resistant coatings in combination with thermal barrier coatings on Î ³ -TiAl alloys for high temperature applications. Surface and Coatings Technology, 2006, 201, 3911-3917.	4.8	72
144	Recent progress in the coating protection of gamma titanium-aluminides. Jom, 2006, 58, 17-21.	1.9	67

#	Article	IF	CITATIONS
145	Analytical electron microscopy of the mixed zone in NiCoCrAlY-based EB-PVD thermal barrier coatings: as-coated condition versus late stages of TBC lifetime. Materials at High Temperatures, 2005, 22, 393-401.	1.0	8
146	Protective coatings on orthorhombic Ti ₂ AlNb alloys. Materials at High Temperatures, 2005, 22, 437-447.	1.0	5
147	Performance of thermal barrier coatings on γ-TiAl. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 930-936.	1.5	18
148	Oxidation and Protection of Titanium Alloys and Titanium Aluminides. , 2005, , 187-230.		11
149	Structure and Properties of Titanium and Titanium Alloys. , 2005, , 1-36.		86
150	Orthorhombic Titanium Aluminides: Intermetallics with Improved Damage Tolerance. , 2005, , 59-88.		3
151	γ-Titanium Aluminide Alloys: Alloy Design and Properties. , 2005, , 89-152.		27
152	Fabrication of Titanium Alloys. , 2005, , 245-261.		8
153	Production, Processing and Application of $\hat{I}^{3}(\text{TiAl})\text{-Based Alloys.}$, 2005, , 351-392.		27
154	Non-Aerospace Applications of Titanium and Titanium Alloys. , 2005, , 393-422.		5
155	Protective coatings on orthorhombic Ti ₂ AlNb alloys. Materials at High Temperatures, 2005, 22, 437-447.	1.0	23
156	Analytical electron microscopy of the mixed zone in NiCoCrAlY-based EB-PVD thermal barrier coatings: as-coated condition versus late stages of TBC lifetime. Materials at High Temperatures, 2005, 22, 393-401.	1.0	11
157	Catalytic Converter for Next Generation Turbine Engines. Key Engineering Materials, 2004, 264-268, 521-524.	0.4	Ο
158	Environmental and Thermal Protection of \hat{I}^3 -TiAl Alloys. Materials Science Forum, 2004, 461-464, 223-230.	0.3	3
159	Nucleation and Growth of Oxide Constituents on NiCoCrAlY Bond Coats during the Different Stages of EB-PVD TBC Deposition and Upon Thermal Loading. Materials Science Forum, 2004, 461-464, 899-906.	0.3	20
160	Interaction between cyclic loading and residual stresses in titanium matrix composites. Journal of Materials Science, 2004, 39, 501-509.	3.7	13
161	SiC-fibre reinforced copper as heat sink material for fusion applications. Journal of Nuclear Materials, 2004, 329-333, 804-808.	2.7	36
162	Investigation of an as-sprayed NiCoCrAlY overlay coating Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 369, 144-150.	5.6	12

#	Article	IF	CITATIONS
163	Review on Advanced EBâ€PVD Ceramic Topcoats for TBC Applications. International Journal of Applied Ceramic Technology, 2004, 1, 302-315.	2.1	230
164	Continuous Fiber Reinforced Titanium Matrix Composites: Fabrication, Properties, and Applications. Advanced Engineering Materials, 2003, 5, 399-410.	3.5	69
165	Titanium Alloys for Aerospace Applications. Advanced Engineering Materials, 2003, 5, 419-427.	3.5	609
166	Influence of bondcoat pre-treatment and surface topology on the lifetime of EB-PVD TBCs. Surface and Coatings Technology, 2003, 165, 217-223.	4.8	66
167	Materials and design concepts for high performance compressorÂcomponents. Aerospace Science and Technology, 2003, 7, 201-210.	4.8	45
168	Some recent trends in research and technology of advanced thermal barrier coatings. Aerospace Science and Technology, 2003, 7, 73-80.	4.8	406
169	Oxidation and lifetime of PYSZ and CeSZ coated Ni-base substrates with MCrAlY bond layers. Materials at High Temperatures, 2003, 20, 475-480.	1.0	7
170	Oxidation and lifetime of PYSZ and CeSZ coated Ni-base substrates with MCrAlY bond layers. Materials at High Temperatures, 2003, 20, 475-479.	1.0	3
171	Influence of Processing on Microstructure and Performance of Electron Beam Physical Vapor Deposition (EB-PVD) Thermal Barrier Coatings. Journal of Engineering for Gas Turbines and Power, 2002, 124, 229-234.	1.1	30
172	Optimisation of the Fatigue Resistance of Metal Matrix Composites. Advanced Engineering Materials, 2002, 4, 497-500.	3.5	3
173	Novel coating systems produced by the combined cathodic arc/unbalanced magnetron sputtering for environmental protection of titanium alloys. Surface and Coatings Technology, 2002, 155, 103-111.	4.8	50
174	EB-PVD Thermal Barrier Coatings for Aeroengines and Gas Turbines. Advanced Engineering Materials, 2001, 3, 193-204.	3.5	149
175	Oxidation of Orthorhombic Titanium Aluminide TI-22AL-25NB in Air between 650 and 1000 °C. Journal of Materials Engineering and Performance, 2001, 10, 225-230.	2.5	13
176	Influence of substrate material on oxidation behavior and cyclic lifetime of EB-PVD TBC systems. Surface and Coatings Technology, 2001, 146-147, 117-123.	4.8	172
177	Hot Corrosion of Nickel-Base Alloys by Alkali-Containing Sulfate Deposits. Materials Science Forum, 2001, 369-372, 571-578.	0.3	6
178	Why do EB-PVD NiCoCrAIY Coatings Oxidize Faster than their LPPS Counterparts?. Materials Science Forum, 2001, 369-372, 703-710.	0.3	4
179	Influence of Processing on Microstructure and Performance of EB-PVD Thermal Barrier Coatings. , 2000, , .		1
180	R&D Status and Needs for Improved EB-PVD Thermal Barrier Coating Performance. Materials Research Society Symposia Proceedings, 2000, 645, 1011.	0.1	2

#	Article	IF	CITATIONS
181	Oxidation-Resistant Coatings for Application on High-Temperature Titanium Alloys in Aeroengines. Advanced Engineering Materials, 2000, 2, 265-269.	3.5	29
182	Two-source jumping beam evaporation for advanced EB-PVD TBC systems. Surface and Coatings Technology, 2000, 133-134, 40-48.	4.8	39
183	Effect of composition on the oxidation and hot corrosion resistance of NiAl doped with precious metals. Surface and Coatings Technology, 2000, 133-134, 15-22.	4.8	125
184	Hot Corrosion of an EB-PVD Thermal-Barrier Coating System at 950°C. Oxidation of Metals, 2000, 54, 401-424.	2.1	46
185	Title is missing!. Oxidation of Metals, 2000, 54, 255-276.	2.1	21
186	Compositional Effects on Aluminide Oxidation Performance: Objectives for Improved Bond Coats. , 2000, , .		15
187	Influence of electron beam physical vapor deposited thermal barrier coating microstructure on thermal barrier coating system performance under cyclic oxidation conditions. Surface and Coatings Technology, 1999, 120-121, 68-76.	4.8	62
188	Environmental Effects on Orthorhombic Alloy Ti-22Al-25Nb in Air Between 650 and 1000°C. Oxidation of Metals, 1999, 52, 475-503.	2.1	27
189	Long-term oxidation of orthorhombic alloy Ti-22Al-25Nb in air between 650 and 800°C. Scripta Materialia, 1999, 41, 901-906.	5.2	53
190	Magnetron-sputtered Ti–Cr–Al coatings for oxidation protection of titanium alloys. Surface and Coatings Technology, 1998, 108-109, 30-35.	4.8	49
191	TEM Investigation on the Adhesion of YPSZ EB-PVD TBCs. Materials Science Forum, 1997, 251-254, 965-972.	0.3	7
192	Oxidation and Protection of Near-Alpha Titanium Alloys. Materials Science Forum, 1997, 251-254, 769-776.	0.3	21
193	Influence of intermetallic TiAl coatings on the fatigue properties of TIMETAL 1100. Scripta Materialia, 1997, 36, 1309-1314.	5.2	21
194	Sputtered intermetallic Ti–Al–X coatings: phase formation and oxidation behavior. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 239-240, 680-687.	5.6	58
195	Intermetallic Ti-Al coatings for protection of titanium alloys: oxidation and mechanical behavior. Surface and Coatings Technology, 1997, 94-95, 34-40.	4.8	63
196	Transformation and oxidation of a sputtered low-expansion Ni-Cr-Al-Ti-Si bond coating for thermal barrier systems. Surface and Coatings Technology, 1997, 94-95, 155-160.	4.8	15
197	Intermetallische Oxidationsschutzschichten fżr Titanlegierungen. Materialwissenschaft Und Werkstofftechnik, 1997, 28, 363-369.	0.9	0
198	Thermocyclic Behavior of Differently Stabilized and structured EB-PVD thermal barrier coatings. Materialwissenschaft Und Werkstofftechnik, 1997, 28, 370-376.	0.9	25

#	Article	IF	CITATIONS
199	Grenzschichtproblematik und Haftung von EB-PVD-WĤmedĤmschichtsystemen. Materialwissenschaft Und Werkstofftechnik, 1997, 28, 384-390.	0.9	7
200	Influence of intermetallic Ti-Al coatings on the creep properties of TIMETAL 1100. Scripta Materialia, 1996, 35, 1423-1428.	5.2	22
201	Influence of microstructure on oxidation behaviour of near-α titanium alloys. Materials Science and Technology, 1996, 12, 213-218.	1.6	37
202	Influence of long-term annealing on tensile properties and fracture of near-α titanium alloy Ti-6Al-2.75Sn-4Zr-0.4Mo-0.45Si. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 1709-1717.	2.2	51
203	Oxide scale formation on an MCrAlY coating in various H2-H2O atmospheres. Surface and Coatings Technology, 1996, 82, 133-144.	4.8	62
204	Phase stability, oxidation, and interdiffusion of a novel Ni?Cr?Al?Ti?Si bond-coating alloy between 900 and 1100�C. Oxidation of Metals, 1995, 43, 329-352.	2.1	13
205	Development of a low-expansion bond coating for Ni-base superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 190, 253-258.	5.6	28
206	Synthesis and Characterization of Ti ₂ AlC and Ti ₂ AlN MAX Phase Coatings Manufactured in an Industrial-Size Coater. Advanced Materials Research, 0, 89-91, 208-213.	0.3	26
207	Intermetallic Ti-Al-Cr Based Layers and Zirconia Topcoats Deposited on Gamma Titanium Aluminides for Environmental Protection. Advanced Materials Research, 0, 278, 497-502.	0.3	2
208	Surface Effects on the Mechanical Properties of Gamma Titanium Aluminides. Materials Science Forum, 0, 706-709, 1071-1076.	0.3	4
209	Oxidation and Decomposition of Ti ₂ AlN MAX Phase Coating Deposited on Nickel-Based Super Alloy IN718. Materials Science Forum, 0, 825-826, 628-635.	0.3	2
210	High-Temperature Aging of Eb-Pvd Thermal Barrier Coatings. Ceramic Engineering and Science Proceedings, 0, , 347-356.	0.1	17
211	Titan und Titanlegierungen: Struktur, Gefüge, Eigenschaften. , 0, , 1-37.		11
212	Titanlegierungen in der Luft- und Raumfahrt. , 0, , 351-368.		4
213	Additive manufacturing of a metallic optical bench—process development, material qualification and demonstration. CEAS Space Journal, 0, , 1.	2.3	1