

Narendra B Dahotre

List of Publications by Year in descending order

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224
papers

7,605
citations

53794

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74163

75
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227
all docs

227
docs citations

227
times ranked

6116
citing authors

#	ARTICLE	IF	CITATIONS
1	Calcium phosphate coatings for bio-implant applications: Materials, performance factors, and methodologies. <i>Materials Science and Engineering Reports</i> , 2009, 66, 1-70.	31.8	559
2	Laser machining of structural ceramics—A review. <i>Journal of the European Ceramic Society</i> , 2009, 29, 969-993.	5.7	400
3	Review paper: Surface Modification for Bioimplants: The Role of Laser Surface Engineering. <i>Journal of Biomaterials Applications</i> , 2005, 20, 5-50.	2.4	370
4	Corrosion degradation and prevention by surface modification of biometallic materials. <i>Journal of Materials Science: Materials in Medicine</i> , 2007, 18, 725-751.	3.6	201
5	Tribological behavior of plasma-sprayed carbon nanotube-reinforced hydroxyapatite coating in physiological solution. <i>Acta Biomaterialia</i> , 2007, 3, 944-951.	8.3	183
6	The application of laser-induced multi-scale surface texturing. <i>Jom</i> , 2005, 57, 46-50.	1.9	144
7	Directly deposited MoS ₂ thin film electrodes for high performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24049-24054.	10.3	140
8	Laser surface coating of Fe-Cr-Mo-Y-B-C bulk metallic glass composition on AISI 4140 steel. <i>Surface and Coatings Technology</i> , 2008, 202, 2623-2631.	4.8	121
9	Laser additive synthesis of high entropy alloy coating on aluminum: Corrosion behavior. <i>Materials Letters</i> , 2015, 142, 122-125.	2.6	117
10	State of residual stress in laser-deposited ceramic composite coatings on aluminum alloys. <i>Acta Materialia</i> , 2007, 55, 1203-1214.	7.9	110
11	Multiscale wear of plasma-sprayed carbon-nanotube-reinforced aluminum oxide nanocomposite coating. <i>Acta Materialia</i> , 2008, 56, 5984-5994.	7.9	107
12	Nanocoatings for engine application. <i>Surface and Coatings Technology</i> , 2005, 194, 58-67.	4.8	103
13	Surface engineering of aluminum alloys for automotive engine applications. <i>Jom</i> , 2004, 56, 46-48.	1.9	99
14	Laser surface engineered TiC coating on 6061 Al alloy: microstructure and wear. <i>Applied Surface Science</i> , 2000, 153, 65-78.	6.1	97
15	Effect of laser surface treatment on corrosion and wear resistance of ACM720 Mg alloy. <i>Surface and Coatings Technology</i> , 2008, 202, 3187-3198.	4.8	95
16	Laser surface cladding of Fe-B-C, Fe-B-Si and Fe-BC-Si-Al-C on plain carbon steel. <i>Surface and Coatings Technology</i> , 2006, 201, 434-440.	4.8	90
17	Surface engineering via nanotechnology: Clusters to components. <i>Jom</i> , 2004, 56, 34-35.	1.9	85
18	Laser surface engineering of steel for hard refractory ceramic composite coating. <i>International Journal of Refractory Metals and Hard Materials</i> , 1999, 17, 283-293.	3.8	79

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19	Laser Surface Modification of Ti-6Al-4V: Wear and Corrosion Characterization in Simulated Biofluid. <i>Journal of Biomaterials Applications</i> , 2006, 21, 49-73.	2.4	75
20	Amorphous Coatings and Surfaces on Structural Materials. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2016, 41, 1-46.	12.3	73
21	Wettability and kinetics of hydroxyapatite precipitation on a laser-textured Ca-P bioceramic coating. <i>Acta Biomaterialia</i> , 2009, 5, 2763-2772.	8.3	71
22	Computational predictions in single-dimensional laser machining of alumina. <i>International Journal of Machine Tools and Manufacture</i> , 2008, 48, 1345-1353.	13.4	65
23	Differences in physical phenomena governing laser machining of structural ceramics. <i>Ceramics International</i> , 2009, 35, 2093-2097.	4.8	65
24	In-vitro bio-corrosion behavior of friction stir additively manufactured AZ31B magnesium alloy-hydroxyapatite composites. <i>Materials Science and Engineering C</i> , 2020, 109, 110632.	7.3	65
25	Laser coating of aluminum alloy EN AW 6082-T651 with TiB ₂ and TiC: Microstructure and mechanical properties. <i>Applied Surface Science</i> , 2013, 282, 914-922.	6.1	64
26	Synthesis of Boride Coating on Steel using High Energy Density Processes. <i>Materials Characterization</i> , 1999, 42, 31-44.	4.4	63
27	Phase constituents and microstructure of laser synthesized TiB ₂ -TiC reinforced composite coating on steel. <i>Scripta Materialia</i> , 2008, 59, 1147-1150.	5.2	62
28	One-dimensional multipulse laser machining of structural alumina: evolution of surface topography. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 68, 69-83.	3.0	62
29	Wetting behaviour of laser synthetic surface microtextures on Ti-6Al-4V for bioapplication. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 1863-1889.	3.4	61
30	Laser surface cladding of MRI 153M magnesium alloy with (Al+Al ₂ O ₃). <i>Surface and Coatings Technology</i> , 2009, 203, 2292-2299.	4.8	60
31	Laser assisted high entropy alloy coating on aluminum: Microstructural evolution. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	58
32	Evolution of surface topography in one-dimensional laser machining of structural alumina. <i>Journal of the European Ceramic Society</i> , 2012, 32, 4205-4218.	5.7	56
33	Improved corrosion and wear resistance of Mg alloys via laser surface modification of Al on AZ31B. <i>Surface and Coatings Technology</i> , 2012, 206, 2308-2315.	4.8	56
34	Variation of structure with input energy during laser surface engineering of ceramic coatings on aluminum alloys. <i>Applied Surface Science</i> , 2002, 199, 222-233.	6.1	53
35	In situ reactions during direct laser deposition of Ti-B ₄ C composites. <i>Scripta Materialia</i> , 2020, 183, 28-32.	5.2	53
36	Laser alloyed Al-W coatings on aluminum for enhanced corrosion resistance. <i>Applied Surface Science</i> , 2015, 328, 205-214.	6.1	52

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37	Microstructure and properties of spark plasma sintered Fe-Cr-Mo-B-C bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 2179-2182.	3.1	51
38	Computational Assessment of Thermokinetics and Associated Microstructural Evolution in Laser Powder Bed Fusion Manufacturing of Ti6Al4V Alloy. <i>Scientific Reports</i> , 2020, 10, 7579.	3.3	51
39	In-vitro biomineralization and biocompatibility of friction stir additively manufactured AZ31B magnesium alloy-hydroxyapatite composites. <i>Bioactive Materials</i> , 2020, 5, 891-901.	15.6	51
40	Thermal effects associated with stress-induced martensitic transformation in a Ti-Ni alloy. <i>Materials Science and Engineering</i> , 1985, 74, 75-84.	0.1	50
41	Laser processing of a SiC/Al-alloy metal matrix composite. <i>Journal of Applied Physics</i> , 1989, 65, 5072-5077.	2.5	49
42	Laser induced hierarchical calcium phosphate structures. <i>Acta Biomaterialia</i> , 2006, 2, 677-683.	8.3	49
43	Wear behavior of plasma electrolytic oxidation (PEO) and hybrid coatings of PEO and laser on MRI 230D magnesium alloy. <i>Wear</i> , 2011, 271, 1987-1997.	3.1	49
44	Laser surface modification of AZ31B Mg alloy for bio-wettability. <i>Journal of Biomaterials Applications</i> , 2015, 29, 915-928.	2.4	49
45	Pulse electrode deposition of superhard boride coatings on ferrous alloy. <i>Surface and Coatings Technology</i> , 1998, 106, 242-250.	4.8	47
46	Pulse laser processing of a SiC/Al-alloy metal matrix composite. <i>Journal of Materials Research</i> , 1991, 6, 514-529.	2.6	46
47	Enhanced tensile yield strength in laser additively manufactured Al _{0.3} CoCrFeNi high entropy alloy. <i>Materialia</i> , 2020, 9, 100522.	2.7	46
48	Comparative wear in titanium diboride coatings on steel using high energy density processes. <i>Wear</i> , 2000, 240, 144-151.	3.1	45
49	In Situ Laser Synthesis of Fe-Based Amorphous Matrix Composite Coating on Structural Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 4957-4966.	2.2	45
50	Synthesis of TiB ₂ -TiC/Fe nano-composite coating by laser surface engineering. <i>Optics and Laser Technology</i> , 2013, 45, 647-653.	4.6	45
51	Effect of micro-segregation of alloying elements on the precipitation behaviour in laser surface engineered Alloy 718. <i>Acta Materialia</i> , 2021, 210, 116844.	7.9	42
52	Coarsening of martensite with multiple generations of twins in laser additively manufactured Ti6Al4V. <i>Acta Materialia</i> , 2021, 213, 116954.	7.9	41
53	Morphological modification in laser-dressed alumina grinding wheel material for microscale grinding. <i>Journal of Materials Processing Technology</i> , 2005, 170, 1-10.	6.3	40
54	Microstructure and corrosion behavior of laser surface-treated AZ31B Mg bio-implant material. <i>Lasers in Medical Science</i> , 2017, 32, 797-803.	2.1	40

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55	Laser surface-engineered vanadium carbide coating for extended die life. <i>Journal of Materials Processing Technology</i> , 2002, 124, 105-112.	6.3	39
56	Laser-induced thermal and spatial nanocrystallization of amorphous Fe-Si-B alloy. <i>Scripta Materialia</i> , 2012, 66, 538-541.	5.2	39
57	Magnetic and mechanical properties of an additively manufactured equiatomic CoFeNi complex concentrated alloy. <i>Scripta Materialia</i> , 2020, 187, 30-36.	5.2	38
58	Interfacial strength of laser surface engineered TiC coating on 6061 Al using four-point bend test. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 289, 34-40.	5.6	37
59	Laser cleaning and dressing of vitrified grinding wheels. <i>Journal of Materials Processing Technology</i> , 2007, 185, 17-23.	6.3	37
60	Microstructure and microtexture in laser-dressed alumina grinding wheel material. <i>Ceramics International</i> , 2005, 31, 621-629.	4.8	36
61	Elevated temperature oxidation of laser surface engineered composite boride coating on steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000, 31, 461-473.	2.2	35
62	Characterization of microstructure in laser surface modified alumina ceramic. <i>Materials Characterization</i> , 2008, 59, 700-707.	4.4	35
63	Laser surface alloying of molybdenum on aluminum for enhanced wear resistance. <i>Surface and Coatings Technology</i> , 2014, 258, 337-342.	4.8	35
64	A review of the physiological and histological effects of laser osteotomy. <i>Journal of Medical Engineering and Technology</i> , 2017, 41, 1-12.	1.4	35
65	Laser coating of a CrMoTaWZr complex concentrated alloy onto a H13 tool steel die head. <i>Surface and Coatings Technology</i> , 2018, 348, 150-158.	4.8	35
66	Computational approach to photonic drilling of silicon carbide. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 45, 704-713.	3.0	34
67	Laser surface treatment for porous and textured Ca-P bio-ceramic coating on Ti-6Al-4V. <i>Biomedical Materials (Bristol)</i> , 2007, 2, 274-281.	3.3	33
68	Rapid thermokinetics driven nanoscale vanadium clustering within martensite laths in laser powder bed fused additively manufactured Ti6Al4V. <i>Materials Research Letters</i> , 2020, 8, 383-389.	8.7	33
69	Pulsed Electrode Surfacing of Steel with TiC Coating: Microstructure and Wear Properties. <i>Journal of Materials Engineering and Performance</i> , 1999, 8, 479-486.	2.5	32
70	Prediction of solidification microstructures during laser dressing of alumina-based grinding wheel material. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 1642-1649.	2.8	32
71	Wettability of nanotextured metallic glass surfaces. <i>Scripta Materialia</i> , 2013, 69, 732-735.	5.2	31
72	Refractory ceramic coatings: processes, systems and wettability/adhesion. <i>Surface and Interface Analysis</i> , 2001, 31, 659-672.	1.8	30

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73	Temporally evolved recoil pressure driven melt infiltration during laser surface modifications of porous alumina ceramic. <i>Journal of Applied Physics</i> , 2007, 101, 054911.	2.5	30
74	Additive friction stir deposition of AZ31B magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 2404-2420.	11.9	30
75	Osteoblast interaction with laser clad HA and SiO ₂ -HA coatings on Ti-6Al-4V. <i>Materials Science and Engineering C</i> , 2011, 31, 1643-1652.	7.3	29
76	Stress-induced selective nano-crystallization in laser-processed amorphous Fe-Si-B alloys. <i>Philosophical Magazine Letters</i> , 2012, 92, 617-624.	1.2	29
77	Effect of processing parameters on the cohesive strength of laser surface engineered ceramic coatings on aluminum alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 342, 183-191.	5.6	28
78	Fabrication and evaluation of a pulse laser-induced Ca-P coating on a Ti alloy for bioapplication. <i>Biomedical Materials (Bristol)</i> , 2009, 4, 015009.	3.3	28
79	Laser assisted Fe-based bulk amorphous coating: Thermal effects and corrosion. <i>Journal of Alloys and Compounds</i> , 2014, 604, 266-272.	5.5	28
80	Effect of friction stir processing on microstructure and mechanical properties of laser-processed Mg 4Y 3Nd alloy. <i>Materials and Design</i> , 2016, 110, 663-675.	7.0	28
81	Solidification and microstructure evolution in additively manufactured H13 steel via directed energy deposition: Integrated experimental and computational approach. <i>Journal of Manufacturing Processes</i> , 2021, 68, 852-866.	5.9	28
82	Laser deposited biocompatible Ca-P coatings on Ti-6Al-4V: Microstructural evolution and thermal modeling. <i>Materials Science and Engineering C</i> , 2013, 33, 165-173.	7.3	27
83	Evolution of interface in pulsed electrode deposited titanium diboride on copper and steel. <i>Surface Engineering</i> , 1999, 15, 27-32.	2.2	26
84	Wetting effects on <i>in vitro</i> bioactivity and <i>in vitro</i> biocompatibility of laser micro-textured Ca-P coating. <i>Biofabrication</i> , 2010, 2, 025001.	7.1	26
85	Fe-Based Amorphous Coatings on AISI 4130 Structural Steel for Corrosion Resistance. <i>Jom</i> , 2012, 64, 709-715.	1.9	26
86	Optimization of biocompatibility in a laser surface treated Mg-AZ31B alloy. <i>Materials Science and Engineering C</i> , 2019, 105, 110028.	7.3	26
87	Laser coating of bioactive glasses on bioimplant titanium alloys. <i>International Journal of Applied Glass Science</i> , 2019, 10, 307-320.	2.0	26
88	Pulsed laser synthesis of ceramic-metal composite coating on steel. <i>Applied Surface Science</i> , 2008, 255, 3188-3194.	6.1	25
89	<i>In situ</i> surface absorptivity prediction during 1.06 μm wavelength laser low aspect ratio machining of structural ceramics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 1433-1439.	1.8	25
90	Laser pulse dependent micro textured calcium phosphate coatings for improved wettability and cell compatibility. <i>Journal of Materials Science: Materials in Medicine</i> , 2010, 21, 2187-2200.	3.6	25

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91	Laser assisted crystallization of ferromagnetic amorphous ribbons: A multimodal characterization and thermal model study. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	25
92	Surface topography in three-dimensional laser machining of structural alumina. <i>Journal of Manufacturing Processes</i> , 2015, 19, 49-58.	5.9	25
93	Dynamic crystallization during non-isothermal laser treatment of Fe-Si-B metallic glass. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 495501.	2.8	25
94	Laser-coated CoFeNiCrAlTi high entropy alloy onto a H13 steel die head. <i>Surface and Coatings Technology</i> , 2020, 387, 125473.	4.8	25
95	Wear resistance of a laser alloyed A-356 aluminum/WC composite. <i>Wear</i> , 2001, 251, 1459-1468.	3.1	24
96	Effect of laser melting on plasma-sprayed aluminum oxide coatings reinforced with carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 94, 861-870.	2.3	24
97	Laser Induced Nitrogen Enhanced Titanium Surfaces for Improved Osseo-Integration. <i>Annals of Biomedical Engineering</i> , 2014, 42, 50-61.	2.5	24
98	Comparison of the Crystallization Behavior of Fe-Si-B-Cu and Fe-Si-B-Cu-Nb-Based Amorphous Soft Magnetic Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 2998-3009.	2.2	23
99	Integrated experimental and theoretical approach for corrosion and wear evaluation of laser surface nitrided, Ti-6Al-4V biomaterial in physiological solution. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 37, 153-164.	3.1	22
100	Influence of niobium on laser de-vitrification of Fe-Si-B based amorphous magnetic alloys. <i>Journal of Non-Crystalline Solids</i> , 2015, 428, 75-81.	3.1	22
101	Process optimization in laser surface structuring of alumina. <i>Journal of Materials Processing Technology</i> , 2008, 203, 498-504.	6.3	21
102	Physical Effects of Multipass Two-Dimensional Laser Machining of Structural Ceramics. <i>Advanced Engineering Materials</i> , 2009, 11, 579-585.	3.5	21
103	An integrated computational approach to single-dimensional laser machining of magnesia. <i>Optics and Lasers in Engineering</i> , 2009, 47, 570-577.	3.8	21
104	Dilution of molybdenum on aluminum during laser surface alloying. <i>Journal of Alloys and Compounds</i> , 2013, 570, 133-143.	5.5	21
105	Electrochemical and DFT studies of laser-alloyed TiB ₂ /TiC/Al coatings on aluminium alloy. <i>Corrosion Science</i> , 2018, 136, 18-27.	6.6	21
106	Rationalizing surface hardening of laser glazed grey cast iron via an integrated experimental and computational approach. <i>Materials and Design</i> , 2018, 156, 570-585.	7.0	21
107	Densification Behavior and Wear Response of Spark Plasma Sintered Iron-Based Bulk Amorphous Alloys. <i>Advanced Engineering Materials</i> , 2012, 14, 400-407.	3.5	20
108	Multiphysics Theoretical Evaluation of Thermal Stresses in Laser Machined Structural Alumina. <i>Lasers in Manufacturing and Materials Processing</i> , 2015, 2, 1-23.	2.2	20

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109	Machining of Bone and Hard Tissues. , 2016, , .		20
110	Microstructure and surface texture driven improvement in in-vitro response of laser surface processed AZ31B magnesium alloy. Journal of Magnesium and Alloys, 2021, 9, 1406-1406.	11.9	20
111	Effects of SiO ₂ substitution on wettability of laser deposited Ca-P biocoating on Ti-6Al-4V. Journal of Materials Science: Materials in Medicine, 2010, 21, 2511-2521.	3.6	19
112	A Review of Diagnostics Methodologies for Metal Additive Manufacturing Processes and Products. Materials, 2021, 14, 4929.	2.9	19
113	Pulsed laser surface treatment of magnesium alloy: Correlation between thermal model and experimental observations. Journal of Materials Processing Technology, 2009, 209, 5060-5067.	6.3	18
114	Absorptivity Transition in the 1.06µm Wavelength Laser Machining of Structural Ceramics. International Journal of Applied Ceramic Technology, 2011, 8, 127-139.	2.1	18
115	Laser surface modification for synthesis of textured bioactive and biocompatible Ca-P coatings on Ti-6Al-4V. Journal of Materials Science: Materials in Medicine, 2011, 22, 1393-1406.	3.6	18
116	Nanocrystallization in spark plasma sintered Fe ₄₈ Cr ₁₅ Mo ₁₄ Y ₂ C ₁₅ B ₆ bulk amorphous alloy. Journal of Applied Physics, 2013, 114, .	2.5	18
117	Effect of Iron on the Enhancement of Magnetic Properties for Cobalt-Based Soft Magnetic Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1019-1023.	2.2	17
118	Phase evolution during laser In-Situ carbide coating. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 797-803.	2.2	16
119	Controlled Evolution of Morphology and Microstructure in Laser Interference-Structured Zirconia. Journal of the American Ceramic Society, 2008, 91, 2138-2142.	3.8	16
120	Improved soft magnetic properties by laser de-vitrification of Fe-Si-B amorphous magnetic alloys. Materials Letters, 2014, 122, 155-158.	2.6	16
121	Laser surface engineering of B ₄ C/Fe nano composite coating on low carbon steel: Experimental coupled with computational approach. Materials and Design, 2020, 190, 108576.	7.0	16
122	Reducing coercivity by chemical ordering in additively manufactured soft magnetic Fe-Co (Hiperco) alloys. Journal of Alloys and Compounds, 2021, 861, 157998.	5.5	16
123	Crystallographic texture dependent bulk anisotropic elastic response of additively manufactured Ti-6Al-4V. Scientific Reports, 2021, 11, 633.	3.3	16
124	Thermomechanically influenced dynamic elastic constants of laser powder bed fusion additively manufactured Ti-6Al-4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 811, 140990.	5.6	16
125	Tribo-corrosion response of additively manufactured high-entropy alloy. Npj Materials Degradation, 2021, 5, .	5.8	16
126	Omega versus alpha precipitation mediated by process parameters in additively manufactured high strength Ti-1Al-8V-5Fe alloy and its impact on mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 821, 141627.	5.6	16

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127	Manufacturing and Characterization of Hybrid Bulk Voxelated Biomaterials Printed by Digital Anatomy 3D Printing. <i>Polymers</i> , 2021, 13, 123.	4.5	16
128	Formation of a wear resistant surface on Al by laser aided in-situ synthesis of MoSi ₂ . <i>Journal of Materials Processing Technology</i> , 1999, 88, 169-179.	6.3	15
129	Tribology of laser modified surface of stainless steel in physiological solution. <i>Journal of Materials Science</i> , 2005, 40, 5619-5626.	3.7	15
130	Evolution of Surface Morphology in Laser-Dressed Alumina Grinding Wheel Material. <i>International Journal of Applied Ceramic Technology</i> , 2006, 3, 375-381.	2.1	15
131	Laser induced multi-scale textured zirconia coating on Ti-6Al-4V. <i>Journal of Materials Science: Materials in Medicine</i> , 2006, 17, 565-572.	3.6	15
132	Rapid surface microstructuring of porous alumina ceramic using continuous wave Nd:YAG laser. <i>Journal of Materials Processing Technology</i> , 2009, 209, 4744-4749.	6.3	15
133	Articulation of surfaces for bio-applications. <i>Jom</i> , 2009, 61, 52-52.	1.9	15
134	Electrochemical and mechanical behavior of laser processed Ti-6Al-4V surface in Ringer's physiological solution. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 1787-1796.	3.6	15
135	Laser Machining of Advanced Materials. , 0, , .		15
136	Laser Dressing of Alumina Grinding Wheels. <i>Journal of Materials Engineering and Performance</i> , 2006, 15, 178-181.	2.5	14
137	Laser surface processing of Ti6Al4V in gaseous nitrogen: corrosion performance in physiological solution. <i>Journal of Materials Science: Materials in Medicine</i> , 2008, 19, 1363-1369.	3.6	14
138	Effect of microstructural evolution on wettability of laser coated calcium phosphate on titanium alloy. <i>Materials Science and Engineering C</i> , 2008, 28, 1560-1564.	7.3	14
139	Laser in-situ synthesis of TiB ₂ -Al composite coating for improved wear performance. <i>Surface and Coatings Technology</i> , 2013, 236, 200-206.	4.8	14
140	Structural Relaxation and Nanocrystallization-Induced Laser Surface Hardening of Fe-Based Bulk Amorphous Alloys. <i>Jom</i> , 2014, 66, 1080-1087.	1.9	14
141	Novel 2D Dynamic Elasticity Maps for Inspection of Anisotropic Properties in Fused Deposition Modeling Objects. <i>Polymers</i> , 2020, 12, 1966.	4.5	14
142	Macro- and Microstructural Studies of Laser-Processed WE43 (Mg-Y-Nd) Magnesium Alloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013, 44, 1190-1200.	2.1	13
143	Laser patterning of Fe-Si-B amorphous ribbons in magnetic field. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 1241-1247.	2.3	13
144	Tribocorrosion performance of laser additively processed high-entropy alloy coatings on aluminum. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	2.3	13

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145	Neural networks in studies on oxidation behavior of laser surface engineered composite boride coatings. <i>Applied Surface Science</i> , 2000, 161, 131-138.	6.1	12
146	Mechanism of high temperature oxidation of laser surface engineered TiC/Al alloy $\hat{\sim}$ composite $\hat{\sim}$ ™ coating on 6061 aluminium alloy. <i>Materials Science and Technology</i> , 2001, 17, 1061-1068.	1.6	12
147	Laser beam operation mode dependent grain morphology of alumina. <i>Journal of Applied Physics</i> , 2007, 102, 123105.	2.5	12
148	Laser surface modification of alumina: Integrated computational and experimental analysis. <i>Ceramics International</i> , 2013, 39, 6207-6213.	4.8	12
149	Synthesis of Al _{0.5} CoCrCuFeNi and Al _{0.5} CoCrFeMnNi High-Entropy Alloys by Laser Melting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014, 45, 1603-1607.	2.1	12
150	Tensile behavior of laser treated Fe-Si-B metallic glass. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	12
151	In Situ Nanocrystallization-Induced Hardening of Amorphous Alloy Matrix Composites Consolidated by Spark Plasma Sintering. <i>Jom</i> , 2016, 68, 1932-1937.	1.9	12
152	Optimization of laser thermal treatment of Fe $\hat{\sim}$ Si $\hat{\sim}$ B metallic glass. <i>Journal of Manufacturing Processes</i> , 2016, 24, 31-37.	5.9	12
153	Tailoring corrosion resistance of laser-cladded Ni/WC surface by adding rare earth elements. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 97, 4043-4054.	3.0	12
154	Fundamentals of three-dimensional Yb-fiber Nd:YAG laser machining of structural bone. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	12
155	Laser patterned hydroxyapatite surfaces on AZ31B magnesium alloy for consumable implant applications. <i>Materialia</i> , 2020, 11, 100693.	2.7	12
156	Fusion Zone Structures in Laser Welded Al-SiC Composites. <i>Journal of Laser Applications</i> , 1991, 3, 35-39.	1.7	11
157	The laser-induced combustion synthesis of iron-oxide nanocomposite coatings on aluminum. <i>Jom</i> , 2002, 54, 39-41.	1.9	11
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