

Narendra B Dahotre

List of Publications by Year in descending order

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224
papers

7,605
citations

53794

45
h-index

74163

75
g-index

227
all docs

227
docs citations

227
times ranked

6116
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Spatially Varying Thermokinetics on the Electrochemical Response of Laser Additively Manufactured Ti6Al4V. <i>Advanced Engineering Materials</i> , 2022, 24, 2100938.	3.5	3
2	Electrochemical and thermal-induced degradation of additively manufactured titanium alloys: a review. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2022, 47, 915-954.	12.3	2
3	Cyclic Thermal Dependent Microstructure Evolution During Laser Directed Energy Deposition of H13 Steel. <i>Transactions of the Indian Institute of Metals</i> , 2022, 75, 1007-1014.	1.5	2
4	Effect of Spatially Varying Thermokinetics on the Electrochemical Response of Laser Additively Manufactured Ti6Al4V. <i>Advanced Engineering Materials</i> , 2022, 24, .	3.5	0
5	Additive friction stir deposition of AZ31B magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 2404-2420.	11.9	30
6	Engineering heterogeneous microstructures in additively manufactured high entropy alloys for high strength and strain hardenability. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 849, 143505.	5.6	9
7	Laser fabrication of structural bone: surface morphology and biomineralization assessment. <i>Lasers in Medical Science</i> , 2021, 36, 131-137.	2.1	2
8	Reducing coercivity by chemical ordering in additively manufactured soft magnetic Fe-Co (Hiperco) alloys. <i>Journal of Alloys and Compounds</i> , 2021, 861, 157998.	5.5	16
9	Crystallographic texture dependent bulk anisotropic elastic response of additively manufactured Ti6Al4V. <i>Scientific Reports</i> , 2021, 11, 633.	3.3	16
10	Microstructure and surface texture driven improvement in in-vitro response of laser surface processed AZ31B magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1406-1406.	11.9	20
11	Spatial Variation of Thermokinetics and Associated Microstructural Evolution in Laser Surface Engineered IN718: Precursor to Additive Manufacturing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 2344-2360.	2.2	8
12	Thermomechanically influenced dynamic elastic constants of laser powder bed fusion additively manufactured Ti6Al4V. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 811, 140990.	5.6	16
13	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
14	Tribo-corrosion response of additively manufactured high-entropy alloy. <i>Npj Materials Degradation</i> , 2021, 5, .	5.8	16
15	Omega versus alpha precipitation mediated by process parameters in additively manufactured high strength Ti-1Al-8V-5Fe alloy and its impact on mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 821, 141627.	5.6	16
16	Coarsening of martensite with multiple generations of twins in laser additively manufactured Ti6Al4V. <i>Acta Materialia</i> , 2021, 213, 116954.	7.9	41
17	A Review of Diagnostics Methodologies for Metal Additive Manufacturing Processes and Products. <i>Materials</i> , 2021, 14, 4929.	2.9	19
18	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

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19	Influence of high heating rates on evolution of oxides on directed laser energy additively fabricated IN718. <i>Npj Materials Degradation</i> , 2021, 5, .	5.8	6
20	Process induced multi-layered Titanium “ Boron carbide composites via additive manufacturing. <i>Additive Manufacturing</i> , 2021, 46, 102156.	3.0	3
21	In-situ monitoring and ex-situ elasticity mapping of laser induced metal melting pool using ultrasound: Numerical and experimental approaches. <i>Journal of Manufacturing Processes</i> , 2021, 71, 178-186.	5.9	7
22	Tribology of rejuvenated CuZr-based amorphous alloys. <i>Wear</i> , 2021, 484-485, 204018.	3.1	3
23	Mechanically tunable ultrasonic metamaterial lens with a subwavelength resolution at long working distances for bioimaging. <i>Smart Materials and Structures</i> , 2021, 30, 015022.	3.5	8
24	Manufacturing and Characterization of Hybrid Bulk Voxeled Biomaterials Printed by Digital Anatomy 3D Printing. <i>Polymers</i> , 2021, 13, 123.	4.5	16
25	Suppression and reactivation of transformation and twinning induced plasticity in laser powder bed fusion additively manufactured Ti-10V-2Fe-3Al. <i>Additive Manufacturing</i> , 2021, 48, 102406.	3.0	3
26	Enhanced tensile yield strength in laser additively manufactured Al _{0.3} CoCrFeNi high entropy alloy. <i>Materialia</i> , 2020, 9, 100522.	2.7	46
27	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
28	Evolution of surface morphology of Er:YAG laser-machined human bone. <i>Lasers in Medical Science</i> , 2020, 35, 1477-1485.	2.1	10
29	Spatial response of laser powder bed additively manufactured Ti6Al4V to temperature variation of aqueous electrolyte. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	7
30	Novel 2D Dynamic Elasticity Maps for Inspection of Anisotropic Properties in Fused Deposition Modeling Objects. <i>Polymers</i> , 2020, 12, 1966.	4.5	14
31	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
32	Embedded Corrosion Sensing with ZnO-PVDF Sensor Textiles. <i>Sensors</i> , 2020, 20, 3053.	3.8	9
33	Magnetic and mechanical properties of an additively manufactured equiatomic CoFeNi complex concentrated alloy. <i>Scripta Materialia</i> , 2020, 187, 30-36.	5.2	38
34	Laser patterned hydroxyapatite surfaces on AZ31B magnesium alloy for consumable implant applications. <i>Materialia</i> , 2020, 11, 100693.	2.7	12
35	In situ reactions during direct laser deposition of Ti-B4C composites. <i>Scripta Materialia</i> , 2020, 183, 28-32.	5.2	53
36	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

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37	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
38	Laser-coated CoFeNiCrAlTi high entropy alloy onto a H13 steel die head. <i>Surface and Coatings Technology</i> , 2020, 387, 125473.	4.8	25
39	Laser surface engineering of B4C/Fe nano composite coating on low carbon steel: Experimental coupled with computational approach. <i>Materials and Design</i> , 2020, 190, 108576.	7.0	16
40	Thermal Assessment of Ex Vivo Laser Ablation of Cortical Bone. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 2415-2426.	5.2	5
41	Oxidation-induced healing in laser-processed thermal barrier coatings. <i>Thin Solid Films</i> , 2019, 688, 137481.	1.8	8
42	Optimization of biocompatibility in a laser surface treated Mg-AZ31B alloy. <i>Materials Science and Engineering C</i> , 2019, 105, 110028.	7.3	26
43	Fundamentals of three-dimensional Yb-fiber Nd:YAG laser machining of structural bone. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	12
44	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
45	Laser coating of bioactive glasses on bioimplant titanium alloys. <i>International Journal of Applied Glass Science</i> , 2019, 10, 307-320.	2.0	26
46	Technological Innovations in Metals Engineering. <i>Jom</i> , 2019, 71, 651-654.	1.9	0
47	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
48	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
49	Integrated experimental and computational approach to laser machining of structural bone. <i>Medical Engineering and Physics</i> , 2018, 51, 56-66.	1.7	8
50	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
51	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
52	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
53	Crystallisation behaviour during tensile loading of laser treated Fe-Si-B metallic glass. <i>Philosophical Magazine</i> , 2017, 97, 497-514.	1.6	8
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 Engineering for Tribology. , 2017, , 661-687.		5
56	Laser Assisted Additively Manufactured Transition Metal Coating on Aluminum. Jom, 2016, 68, 1819-1829.	1.9	1
57	Fundamental Operations of Bone Machining. , 2016, , 23-44.		0
58	In Situ Nanocrystallization-Induced Hardening of Amorphous Alloy Matrix Composites Consolidated by Spark Plasma Sintering. Jom, 2016, 68, 1932-1937.	1.9	12
59	Laser joining of plain carbon steel using Fe-based amorphous alloy filler powder. Journal of Materials Processing Technology, 2016, 238, 55-64.	6.3	7
60	Effect of friction stir processing on microstructure and mechanical properties of laser-processed Mg 4Y 3Nd alloy. Materials and Design, 2016, 110, 663-675.	7.0	28
61	Optimization of laser thermal treatment of Fe-Si-B metallic glass. Journal of Manufacturing Processes, 2016, 24, 31-37.	5.9	12
62	Additive Manufacturing via Surface Engineering. Jom, 2016, 68, 1759-1761.	1.9	5
63	Machining of Bone and Hard Tissues. , 2016, , .		20
64	Thermodynamics and kinetics of laser induced transformation in zirconium based bulk metallic glass. Journal of Non-Crystalline Solids, 2016, 432, 237-245.	3.1	10
65	Amorphous Coatings and Surfaces on Structural Materials. Critical Reviews in Solid State and Materials Sciences, 2016, 41, 1-46.	12.3	73
66	Tensile behavior of laser treated Fe-Si-B metallic glass. Journal of Applied Physics, 2015, 118, .	2.5	12
67	Laser Machining of Structural Alumina: Influence of Moving Laser Beam on the Evolution of Surface Topography. International Journal of Applied Ceramic Technology, 2015, 12, 665-678.	2.1	10
68	Modeling and experimental approaches of laser system for lasik eye surgery. , 2015, , .		0
69	Surface topography in three-dimensional laser machining of structural alumina. Journal of Manufacturing Processes, 2015, 19, 49-58.	5.9	25
70	Dynamic crystallization during non-isothermal laser treatment of Fe-Si-B metallic glass. Journal Physics D: Applied Physics, 2015, 48, 495501.	2.8	25
71	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
72	Multiphysics Theoretical Evaluation of Thermal Stresses in Laser Machined Structural Alumina. Lasers in Manufacturing and Materials Processing, 2015, 2, 1-23.	2.2	20

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73	Influence of niobium on laser de-vitrification of Fe-Si-B based amorphous magnetic alloys. Journal of Non-Crystalline Solids, 2015, 428, 75-81.	3.1	22
74	Directly deposited MoS ₂ thin film electrodes for high performance supercapacitors. Journal of Materials Chemistry A, 2015, 3, 24049-24054.	10.3	140
75	Laser alloyed Al-W coatings on aluminum for enhanced corrosion resistance. Applied Surface Science, 2015, 328, 205-214.	6.1	52
76	Laser additive synthesis of high entropy alloy coating on aluminum: Corrosion behavior. Materials Letters, 2015, 142, 122-125.	2.6	117
77	Laser surface modification of AZ31B Mg alloy for bio-wettability. Journal of Biomaterials Applications, 2015, 29, 915-928.	2.4	49
78	Laser assisted high entropy alloy coating on aluminum: Microstructural evolution. Journal of Applied Physics, 2014, 116, .	2.5	58
79	Synthesis of Al _{0.5} CoCrCuFeNi and Al _{0.5} CoCrFeMnNi High-Entropy Alloys by Laser Melting. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1603-1607.	2.1	12
80	Laser assisted Fe-based bulk amorphous coating: Thermal effects and corrosion. Journal of Alloys and Compounds, 2014, 604, 266-272.	5.5	28
81	Comparison of the Crystallization Behavior of Fe-Si-B-Cu and Fe-Si-B-Cu-Nb-Based Amorphous Soft Magnetic Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2998-3009.	2.2	23
82	Laser Induced Nitrogen Enhanced Titanium Surfaces for Improved Osseo-Integration. Annals of Biomedical Engineering, 2014, 42, 50-61.	2.5	24
83	Laser surface alloying of molybdenum on aluminum for enhanced wear resistance. Surface and Coatings Technology, 2014, 258, 337-342.	4.8	35
84	Laser patterning of Fe-Si-B amorphous ribbons in magnetic field. Applied Physics A: Materials Science and Processing, 2014, 117, 1241-1247.	2.3	13
85	Structural Relaxation and Nanocrystallization-Induced Laser Surface Hardening of Fe-Based Bulk Amorphous Alloys. Jom, 2014, 66, 1080-1087.	1.9	14
86	Improved soft magnetic properties by laser de-vitrification of Fe-Si-B amorphous magnetic alloys. Materials Letters, 2014, 122, 155-158.	2.6	16
87	Integrated experimental and theoretical approach for corrosion and wear evaluation of laser surface nitrided, Ti-6Al-4V biomaterial in physiological solution. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 153-164.	3.1	22
88	MC3T3-E1 osteoblast adhesion to laser induced hydroxyapatite coating on Ti alloy. Biomaterials and Biomechanics in Bioengineering, 2014, 1, 81-93.	0.1	0
89	One-dimensional multipulse laser machining of structural alumina: evolution of surface topography. International Journal of Advanced Manufacturing Technology, 2013, 68, 69-83.	3.0	62
90	Laser surface modification of alumina: Integrated computational and experimental analysis. Ceramics International, 2013, 39, 6207-6213.	4.8	12

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91	Macro- and Microstructural Studies of Laser-Processed WE43 (Mg-Y-Nd) Magnesium Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 1190-1200.	2.1	13
92	Laser in-situ synthesis of TiB ₂ -Al composite coating for improved wear performance. Surface and Coatings Technology, 2013, 236, 200-206.	4.8	14
93	Laser coating of aluminum alloy EN AW 6082-T651 with TiB ₂ and TiC: Microstructure and mechanical properties. Applied Surface Science, 2013, 282, 914-922.	6.1	64
94	Wettability of nanotextured metallic glass surfaces. Scripta Materialia, 2013, 69, 732-735.	5.2	31
95	Computational modeling and experimental based parametric study of multi-track laser processing on alumina. Optics and Laser Technology, 2013, 48, 570-579.	4.6	9
96	Dilution of molybdenum on aluminum during laser surface alloying. Journal of Alloys and Compounds, 2013, 570, 133-143.	5.5	21
97	Laser deposited biocompatible Ca-P coatings on Ti-6Al-4V: Microstructural evolution and thermal modeling. Materials Science and Engineering C, 2013, 33, 165-173.	7.3	27
98	Synthesis of TiB ₂ -TiC/Fe nano-composite coating by laser surface engineering. Optics and Laser Technology, 2013, 45, 647-653.	4.6	45
99	Design and optimization of microstructure for improved corrosion resistance in laser surface alloyed aluminum with molybdenum. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1421-1432.	2.2	9
100	Laser assisted crystallization of ferromagnetic amorphous ribbons: A multimodal characterization and thermal model study. Journal of Applied Physics, 2013, 114, .	2.5	25
101	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
102	Multiscale laser materials engineering: energy-efficient processing and materials performance. Nanomaterials and Energy, 2013, 2, 64-70.	0.2	2
103	PULSED LASER SURFACE MODIFICATION OF AZ31B WITH Al-Si. Surface Review and Letters, 2012, 19, 1250015.	1.1	0
104	Stress-induced selective nano-crystallization in laser-processed amorphous Fe-Si-B alloys. Philosophical Magazine Letters, 2012, 92, 617-624.	1.2	29
105	Evolution of surface topography in one-dimensional laser machining of structural alumina. Journal of the European Ceramic Society, 2012, 32, 4205-4218.	5.7	56
106	In Situ Laser Synthesis of Fe-Based Amorphous Matrix Composite Coating on Structural Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4957-4966.	2.2	45
107	Densification Behavior and Wear Response of Spark Plasma Sintered Iron-Based Bulk Amorphous Alloys. Advanced Engineering Materials, 2012, 14, 400-407.	3.5	20
108	Fe-Based Amorphous Coatings on AISI 4130 Structural Steel for Corrosion Resistance. Jom, 2012, 64, 709-715.	1.9	26

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109	Laser-induced thermal and spatial nanocrystallization of amorphous Fe ₈₀ Si ₂₀ B alloy. Scripta Materialia, 2012, 66, 538-541.	5.2	39
110	Improved corrosion and wear resistance of Mg alloys via laser surface modification of Al on AZ31B. Surface and Coatings Technology, 2012, 206, 2308-2315.	4.8	56
111	Absorptivity Transition in the 1.06 μ m Wavelength Laser Machining of Structural Ceramics. International Journal of Applied Ceramic Technology, 2011, 8, 127-139.	2.1	18
112	Osteoblast interaction with laser clad HA and SiO ₂ -HA coatings on Ti-6Al-4V. Materials Science and Engineering C, 2011, 31, 1643-1652.	7.3	29
113	Wear behavior of plasma electrolytic oxidation (PEO) and hybrid coatings of PEO and laser on MRI 230D magnesium alloy. Wear, 2011, 271, 1987-1997.	3.1	49
114	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
115	Electrochemical and mechanical behavior of laser processed Ti-6Al-4V surface in Ringer's physiological solution. Journal of Materials Science: Materials in Medicine, 2011, 22, 1787-1796.	3.6	15
116	Periodically Laser Patterned Fe ₈₀ Si ₂₀ Amorphous Ribbons: Phase Evolution and Mechanical Behavior. Advanced Engineering Materials, 2011, 13, 955-960.	3.5	10
117	Surface Engineering for Amorphous-, Nanocrystalline-, and Bio-materials. Jom, 2010, 62, 64-64.	1.9	0
118	Laser process effects on physical texture and wetting in implantable Ti-alloys. Jom, 2010, 62, 76-83.	1.9	7
119	Laser pulse dependent micro textured calcium phosphate coatings for improved wettability and cell compatibility. Journal of Materials Science: Materials in Medicine, 2010, 21, 2187-2200.	3.6	25
120	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
121	Fractal Approach to Hierarchically Evolved Laser Processed CaP Coatings. Advanced Engineering Materials, 2010, 12, 517-521.	3.5	1
122	Wetting effects on <i>in vitro</i> bioactivity and <i>in vitro</i> biocompatibility of laser micro-textured Ca-P coating. Biofabrication, 2010, 2, 025001.	7.1	26
123	Wetting behaviour of laser synthetic surface microtextures on Ti-6Al-4V for bioapplication. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 1863-1889.	3.4	61
124	Physical Effects of Multipass Two-Dimensional Laser Machining of Structural Ceramics. Advanced Engineering Materials, 2009, 11, 579-585.	3.5	21
125	Faceted Surface Grain Morphology of Rapidly Solidified Alumina: Characterization and Potential Applications. Advanced Engineering Materials, 2009, 11, 1030-1033.	3.5	0
126	Differences in physical phenomena governing laser machining of structural ceramics. Ceramics International, 2009, 35, 2093-2097.	4.8	65

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127	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
128	Articulation of surfaces for bio-applications. <i>Jom</i> , 2009, 61, 52-52.	1.9	15
129	Computational approach to photonic drilling of silicon carbide. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 45, 704-713.	3.0	34
130	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
131	In-situ surface absorptivity prediction during 1.06 μ m 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
132	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
133	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
134	Laser machining of structural ceramics—A review. <i>Journal of the European Ceramic Society</i> , 2009, 29, 969-993.	5.7	400
135	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
136	Pulsed laser surface treatment of magnesium alloy: Correlation between thermal model and experimental observations. <i>Journal of Materials Processing Technology</i> , 2009, 209, 5060-5067.	6.3	18
137	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
138	Microstructure and properties of spark plasma sintered Fe-Cr-Mo-Y-B-C bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 2179-2182.	3.1	51
139	A thermal model for laser interaction with thick dielectric film on metallic substrate: Application to Ca-P layer on Ti alloy. <i>Journal of Alloys and Compounds</i> , 2009, 487, 499-503.	5.5	3
140	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
141	Pulsed laser synthesis of ceramic-metal composite coating on steel. <i>Applied Surface Science</i> , 2008, 255, 3188-3194.	6.1	25
142	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
143	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
144	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

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145	Multilevel residual stress evaluation in laser surface modified alumina ceramic. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 90, 493-499.	2.3	9
146	Process optimization in laser surface structuring of alumina. <i>Journal of Materials Processing Technology</i> , 2008, 203, 498-504.	6.3	21
147	Multiscale wear of plasma-sprayed carbon-nanotube-reinforced aluminum oxide nanocomposite coating. <i>Acta Materialia</i> , 2008, 56, 5984-5994.	7.9	107
148	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
149	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
150	Controlled Evolution of Morphology and Microstructure in Laser Interference-Structured Zirconia. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2138-2142.	3.8	16
151	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
152	Characterization of microstructure in laser surface modified alumina ceramic. <i>Materials Characterization</i> , 2008, 59, 700-707.	4.4	35
153	Laser beam operation mode dependent grain morphology of alumina. <i>Journal of Applied Physics</i> , 2007, 102, 123105.	2.5	12
154	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
155	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
156	State of residual stress in laser-deposited ceramic composite coatings on aluminum alloys. <i>Acta Materialia</i> , 2007, 55, 1203-1214.	7.9	110
157	Tribological behavior of plasma-sprayed carbon nanotube-reinforced hydroxyapatite coating in physiological solution. <i>Acta Biomaterialia</i> , 2007, 3, 944-951.	8.3	183
158	Laser cleaning and dressing of vitrified grinding wheels. <i>Journal of Materials Processing Technology</i> , 2007, 185, 17-23.	6.3	37
159	Computational prediction of grain size during rapid laser surface modification of Al ₂ O ₃ ceramic. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007, 1, R4-R6.	2.4	5
160	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
161	The laser surface modification of advanced ceramics: A modeling approach. <i>Jom</i> , 2007, 59, 35-38.	1.9	5
162	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

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163	Microgrinding hypereutectoid steels using laser-modified corundum abrasive materials. International Journal of Machining and Machinability of Materials, 2006, 1, 12.	0.1	4
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