Lawrence Murr

List of Publications by Year
in descending order

251 papers	14,685 citations	29994 54 h-index	20900 115 g-index
253 all docs	253 docs citations	253 times ranked	10310 citing authors

#	Article	IF	Citations
1	Metal Fabrication by Additive Manufacturing Using Laser and Electron Beam Melting Technologies. Journal of Materials Science and Technology, 2012, 28, 1-14.	5.6	1,235
2	Microstructures and mechanical behavior of Inconel 718 fabricated by selective laser melting. Acta Materialia, 2012, 60, 2229-2239.	3.8	873
3	Microstructure and mechanical behavior of Tiâ€“6Alâ€“4V produced by rapid-layer manufacturing, for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 20-32.	1.5	815
4	Microstructures and mechanical properties of electron beam-rapid manufactured Tiâ€“6Alâ€“4V biomedical prototypes compared to wrought Tiâ€“6Alâ€“4V. Materials Characterization, 2009, 60, 96-105.	1.9	483
5	Flow patterns during friction stir welding. Materials Characterization, 2002, 49, 95-101.	1.9	453
6	Characterization of titanium aluminide alloy components fabricated by additive manufacturing using electron beam melting. Acta Materialia, 2010, 58, 1887-1894.	3.8	412
7	Fabrication of Metal and Alloy Components by Additive Manufacturing: Examples of 3D Materials Science. Journal of Materials Research and Technology, 2012, 1, 42-54.	2.6	365
8	Microstructures and Properties of 17-4 PH Stainless Steel Fabricated by Selective Laser Melting. Journal of Materials Research and Technology, 2012, 1, 167-177.	2.6	317
9	Influence of cell shape on mechanical properties of Tiâ€“6Alâ€“4V meshes fabricated by electron beam melting method. Acta Biomaterialia, 2014, 10, 4537-4547.	4.1	281
10	Cytotoxic effects of aggregated nanomaterialsâ˜†. Acta Biomaterialia, 2007, 3, 351-358.	4.1	278
11	Flow visualization and residual microstructures associated with the friction-stir welding of 2024 aluminum to 6061 aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 271, 213-223.	2.6	275
12	Compression deformation behavior of Tiâ€“6Alâ€“4V alloy with cellular structures fabricated by electron beam melting. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 16, 153-162.	1.5	269
13	Heat Input and Temperature Distribution in Friction Stir Welding. Journal of Materials Processings and Manufacturing Science, 1998, 7, 163-172.	0.1	250
14	Compression fatigue behavior of Tiâ€“6Alâ€“4V mesh arrays fabricated by electron beam melting. Acta Materialia, 2012, 60, 793-802.	3.8	244
15	Recent progress in magnesiumâ€“lithium alloys. International Materials Reviews, 2015, 60, 65-100.	9.4	243
16	Frontiers of 3D Printing/Additive Manufacturing: from Human Organs to Aircraft Fabricationâ€. Journal of Materials Science and Technology, 2016, 32, 987-995.	5.6	234
17	Characterization of Tiâ€“6Alâ€“4V open cellular foams fabricated by additive manufacturing using electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1861-1868.	2.6	217
18	A model for the formation of annealing twins in F.C.C. metals and alloys. Acta Metallurgica, 1978, 26, 951-962.	2.1	214

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19	Microstructure and mechanical properties of open-cellular biomaterials prototypes for total knee replacement implants fabricated by electron beam melting. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1396-1411.	1.5	213
20	Comparative in vitro cytotoxicity assessment of some manufacturednanoparticulate materials characterized by transmissionelectron microscopy. Journal of Nanoparticle Research, 2005, 7, 145-169.	0.8	208
21	Microstructures in friction-stir welded dissimilar magnesium alloys and magnesium alloys to 6061-T6 aluminum alloy. Materials Characterization, 2004, 52, 49-64.	1.9	206
22	A Review of FSW Research on Dissimilar Metal and Alloy Systems. Journal of Materials Engineering and Performance, 2010, 19, 1071-1089.	1.2	195
23	Evaluation of Titanium Alloys Fabricated Using Rapid Prototyping Technologiesâ€"Electron Beam Melting and Laser Beam Melting. Materials, 2011, 4, 1776-1792.	1.3	185
24	Novel precipitateâ€"microstructural architecture developed in the fabrication of solid copper components by additive manufacturing using electron beam melting. Acta Materialia, 2011, 59, 4088-4099.	3.8	182
25	Nucleation and evolution of strain-induced martensitic (b.c.c.) embryos and substructure in stainless steel: A transmission electron microscope study. Acta Metallurgica, 1983, 31, 267-274.	2.1	163
26	Metallurgy of additive manufacturing: Examples from electron beam melting. Additive Manufacturing, 2015, 5, 40-53.	1.7	163
27	Characterization of tool wear and weld optimization in the friction-stir welding of cast aluminum 359+20% SiC metal-matrix composite. Materials Characterization, 2004, 52, 65-75.	1.9	148
28	Fundamental studies of the contribution of galvanic interaction to acid-bacterial leaching of mixed metal sulfides. Hydrometallurgy, 1983, 9, 235-256.	1.8	146
29	Friction-stir welding of magnesium alloy AZ31B. Journal of Materials Science Letters, 2002, 21, 917-920.	0.5	145
30	Self-optimization in tool wear for friction-stir welding of Al 6061+20% Al2O3 MMC. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 349, 156-165.	2.6	145
31	Open-cellular copper structures fabricated by additive manufacturing using electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5379-5386.	2.6	130
32	Microstructure evolution associated with adiabatic shear bands and shear band failure in ballistic plug formation in Tiâ€"6Alâ€"4V targets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 205-216.	2.6	122
33	Experimental and theoretical observations on the relationship between dislocation cell size, dislocation density, residual hardness, peak pressure and pulse duration in shock-loaded nickel. Acta Metallurgica, 1978, 26, 847-857.	2.1	113
34	Galvanic interaction between chalcopyrite and pyrite during bacterial leaching of low-grade waste. Hydrometallurgy, 1978, 3, 309-326.	1.8	110
35	Microstructures of Rene 142 nickel-based superalloy fabricated by electron beam melting. Acta Materialia, 2013, 61, 4289-4296.	3.8	106
36	A TEM study of soot, carbon nanotubes, and related fullerene nanopolyhedra in common fuel-gas combustion sources. Materials Characterization, 2005, 55, 50-65.	1.9	90

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37	Biocompatibility and mechanical behaviour of three-dimensional scaffolds for biomedical devices: processâ€“structureâ€“property paradigm. International Materials Reviews, 2016, 61, 20-45.	9.4	90
38	3D metal droplet printing development and advanced materials additive manufacturing. Journal of Materials Research and Technology, 2017, 6, 77-89.	2.6	85
39	Combined effects of deformation (strain and strain state), grain size, and carbon content on carbide precipitation and corrosion sensitization in 304 stainless steel. Materials Characterization, 1995, 35, 99-112.	1.9	81
40	Plant Growth Response in a Simulated Electric Field-environment. Nature, 1963, 200, 490-491.	13.7	74
41	Temperature coefficient of twin-boundary energy: The determination of stacking-fault energy from the coherent twin-boundary energy in pure F.C.C. metals. Scripta Metallurgica, 1972, 6, 203-208.	1.2	74
42	Kinetic study of sulfide leaching by galvanic interaction between chalcopyrite, pyrite, and sphalerite in the presence ofT. ferrooxidans(30Â°C) and a thermophilic microorganism (55Â°C). Biotechnology and Bioengineering, 1982, 24, 919-940.	1.7	74
43	Direct observations of selective attachment of bacteria on low-grade sulfide ores and other mineral surfaces. Hydrometallurgy, 1976, 2, 11-24.	1.8	68
44	Twin boundary energetics in pure aluminium. Acta Metallurgica, 1973, 21, 791-797.	2.1	65
45	Chemistry and nanoparticulate compositions of a 10,000 year-old ice core melt water. Water Research, 2004, 38, 4282-4296.	5.3	65
46	Multi-material metallic structure fabrication using electron beam melting. International Journal of Advanced Manufacturing Technology, 2014, 71, 33-45.	1.5	64
47	Measurement of interfacial free energies and associated temperature coefficients in 304 stainless steel. Acta Metallurgica, 1973, 21, 595-604.	2.1	63
48	Effect of shock pressure, pulse duration, and grain size on shock-deformation twinning in molybdenum. Materials Science and Engineering, 1978, 35, 273-285.	0.1	63
49	Friction-stir welding of aluminum alloy 2024 to silver. Journal of Materials Science Letters, 2000, 19, 1047-1051.	0.5	62
50	Microstructures and Hardness Properties for Î²-Phase Tiâ€“24Nbâ€“4Zrâ€“7.9Sn Alloy Fabricated by Electron Beam Melting. Journal of Materials Science and Technology, 2013, 29, 1011-1017.	5.6	57
51	Interplay between selfâ€assembled structure of bone morphogenetic proteinâ€2 (<scp>BMP</scp>â€2) and osteoblast functions in threeâ€dimensional titanium alloy scaffolds: <scp>S</scp>timulation of osteogenic activity. Journal of Biomedical Materials Research - Part A, 2016, 104, 517-532.	2.1	57
52	Interplay between cellular activity and threeâ€dimensional scaffoldâ€cell constructs with different foam structure processed by electron beam melting. Journal of Biomedical Materials Research - Part A, 2015, 103, 1677-1692.	2.1	56
53	Effect of stress amplitude and stress duration on twinning and phase transformations in shock-loaded and cold-rolled 304 stainless steel. Materials Science and Engineering, 1975, 20, 35-46.	0.1	55
54	Effect of Grain size, dislocation cell size and deformation twin spacing on the residual strengthening of shock-loaded nickel. Materials Science and Engineering, 1979, 39, 81-93.	0.1	55

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55	Work jardening and the pressure dependence of dislocation density and arrangements in shock loaded nickel and copper. Scripta Metallurgica, 1978, 12, 201-206.	1.2	52
56	Kinetic effects of particle-size and crystal dislocation density on the dichromate leaching of chalcopyrite. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1981, 12, 255-267.	0.5	52
57	Evaluation of mechanical and corrosion biocompatibility of TiTa alloys. Journal of Materials Science: Materials in Medicine, 2001, 12, 283-292.	1.7	52
58	Relationship of grain size and deformation mechanism to the fracture behavior in high strengthâ€“high ductility nanostructured austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 626, 41-50.	2.6	51
59	Microstructural and Process Characterization of Conductive Traces Printed from Ag Particulate Inks. Materials, 2011, 4, 963-979.	1.3	50
60	Defect microstructure and mechanical properttes in shock-hardened metals. Experimental Mechanics, 1969, 9, 145-155.	1.1	49
61	A TEM analysis of nanoparticulates in a Polar ice core. Materials Characterization, 2004, 52, 15-25.	1.9	48
62	Comparison of tungsten heavy-alloy rod penetration into ductile and hard metal targets: microstructural analysis and computer simulations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 131-143.	2.6	46
63	Carbon Nanotubes and Other Fullerene Nanocrystals in Domestic Propane and Natural Gas Combustion Streams. Journal of Nanoscience and Nanotechnology, 2004, 4, 716-718.	0.9	46
64	Direct observations of vacancies and vacancy-type defects in molybdenum following uniaxial shock-wave compression. Acta Metallurgica, 1976, 24, 261-270.	2.1	45
65	Influence of deposit morphology on the kinetics of copper cementation on pure iron. Hydrometallurgy, 1979, 4, 57-82.	1.8	45
66	Biological effects of nanoparticulate materials. Materials Science and Engineering C, 2006, 26, 1421-1427.	3.8	45
67	Study of Erbium Thin Film Oxidation in the Electron Microscope. Physica Status Solidi (B): Basic Research, 1967, 24, 135-148.	0.7	44
68	Effect of environmental parameters on the efficiency of biodegradation of basalt rock by fungi. Biotechnology and Bioengineering, 1979, 21, 875-885.	1.7	43
69	Interactive effects of shock loading parameters on the substructure and mechanical properties of nickel and stainless steel. Materials Science and Engineering, 1979, 37, 249-269.	0.1	43
70	Strain-induced dislocation emission from grain boundaries in stainless steel. Materials Science and Engineering, 1981, 51, 71-79.	0.1	43
71	Comparison of residual microstructures associated with impact craters in fcc stainless steel and bcc iron targets: the microtwin versus microband issue. Acta Materialia, 2002, 50, 121-131.	3.8	43
72	Carbon nanotubes in wood soot. Atmospheric Science Letters, 2006, 7, 93-95.	0.8	43

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73	Combustion-Generated Nanoparticulates in the El Paso, TX, USA / Juarez, Mexico Metroplex: Their Comparative Characterization and Potential for Adverse Health Effects. International Journal of Environmental Research and Public Health, 2006, 3, 48-66.	1.2	42
74	Experimental observations and computer simulations for metallic projectile fragmentation and impact crater development in thick metal targets. International Journal of Impact Engineering, 2006, 32, 1981-1999.	2.4	41
75	Evidence of low-temperature superparamagnetism in Mn₃O₄nanoparticle ensembles. Nanotechnology, 2010, 21, 365703.	1.3	41
76	The effects of kinetic variables on the structure of copper deposits cemented on pure aluminum discs: A scanning electron microscopic study. Hydrometallurgy, 1978, 3, 163-180.	1.8	40
77	Acid-bacterial and ferric sulfate leaching of pyrite single crystals. Biotechnology and Bioengineering, 1982, 24, 83-96.	1.7	40
78	End cap nucleation of carbon nanotubes. Carbon, 2006, 44, 447-455.	5.4	40
79	Cytotoxic Responses and Potential Respiratory Health Effects of Carbon and Carbonaceous Nanoparticulates in the Paso del Norte Airshed Environment. International Journal of Environmental Research and Public Health, 2008, 5, 12-25.	1.2	39
80	Optimization of the shear strengths of ultrasonically consolidated Ti/Al 3003 dual-material structures. Journal of Materials Processing Technology, 2011, 211, 988-995.	3.1	39
81	Large strain plastic deformation of commercially pure nickel. Metal Science, 1983, 17, 198-208.	0.7	38
82	Characterization of nanostructure phenomena in airborne particulate aggregates and their potential for respiratory health effects. Journal of Materials Science: Materials in Medicine, 2004, 15, 237-247.	1.7	38
83	Characterization and comparison of microstructures in the shaped-charge regime: copper and tantalum. Materials Characterization, 1993, 30, 201-216.	1.9	37
84	Explosive consolidation of an amorphous iron-base powder. Scripta Metallurgica, 1983, 17, 1353-1357.	1.2	35
85	In vivo corrosion, tumor outcome, and microarray gene expression for two types of muscle-implanted tungsten alloys. Toxicology and Applied Pharmacology, 2012, 265, 128-138.	1.3	35
86	Comparison of residual microstructures for 304 stainless steel shock loaded in plane and cylindrical geometries: Implications for dynamic compaction and forming. Acta Metallurgica, 1985, 33, 677-684.	2.1	34
87	Dynamic recrystallization in detonating tantalum shaped charges: A mechanism for extreme plastic deformation. Materials Characterization, 1994, 33, 65-74.	1.9	34
88	Biological Response of Next-Generation of 3D Ti-6Al-4V Biomedical Devices Using Additive Manufacturing of Cellular and Functional Mesh Structures. Journal of Biomaterials and Tissue Engineering, 2014, 4, 755-771.	0.0	34
89	Effects of deformation (strain) and heat treatment on grain boundary sensitization and precipitation in austenitic stainless steels. Materials Characterization, 1990, 24, 135-158.	1.9	33
90	Novel deformation processes and microstructures involving ballistic penetrator formation and hypervelocity impact and penetration phenomena. Materials Characterization, 1996, 37, 245-276.	1.9	33

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91	Effect of prestrain and stacking-fault energy on the application of the Hall-Petch relation in fcc metals and alloys. Metallography, 1980, 13, 203-224.	0.4	32
92	Microbands and shear-related microstructural phenomena associated with impact craters in 6061-T6 aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 216, 69-79.	2.6	32
93	Transmission electron microscope study of crystal defects in natural fluorite. Physica Status Solidi A, 1974, 22, 239-251.	1.7	30
94	The effect of prior deformation on the residual microstructure of explosively deformed stainless steels. Materials Science and Engineering, 1980, 44, 97-113.	0.1	30
95	Microstructures of Niobium Components Fabricated by Electron Beam Melting. Metallography, Microstructure, and Analysis, 2013, 2, 183-189.	0.5	29
96	Measurement of interfacial energy of adhesion by scanning electron microscopy. Materials Science and Engineering, 1973, 12, 277-283.	0.1	28
97	Effect of shock-stress duration on the residual structure and hardness of nickel, chromel and inconel. Materials Science and Engineering, 1975, 19, 115-122.	0.1	28
98	Microstructures in Friction-Stir Welded Metals. Journal of Materials Processings and Manufacturing Science, 1998, 7, 145-161.	0.1	27
99	Yielding and grainâ€boundary ledges: Some comments on the Hallâ€Petch relation. Applied Physics Letters, 1974, 24, 533-536.	1.5	26
100	Laser-shock-induced microstructural changes and a comparison with explosive-shock-induced phenomena in metals: Field-ion and electron microscopic studies. Journal of Applied Physics, 1978, 49, 2427.	1.1	26
101	Shock Deformation of Inconel 600 Alloy: Effect of Fine Coherent Precipitates on Explosiveâ€Shock Hardening. Journal of Applied Physics, 1969, 40, 3796-3802.	1.1	25
102	Shock wave induced changes in superconductivity in YBa2Cu3O7â^'Î´. Applied Physics Letters, 1989, 55, 1575-1577.	1.5	25
103	Dynamic recrystallization-induced flow phenomena in tungstenâ€“tantalum (4%) [001] single-crystal rod ballistic penetrators. Materials Characterization, 2002, 48, 407-421.	1.9	25
104	Grain boundary contributions to deformation and solid-state flow in severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 409, 13-23.	2.6	25
105	Microbands and microtwins associated with impact craters in copper and brass targets: the role of stacking fault energy. Materials Characterization, 2002, 49, 359-366.	1.9	24
106	Variations in grain boundary ledge structure with thermo-mechanical treatment in high-purity aluminum. Scripta Metallurgica, 1976, 10, 477-480.	1.2	23
107	Microstructures for Two-Phase Gamma Titanium Aluminide Fabricated by Electron Beam Melting. Metallography, Microstructure, and Analysis, 2012, 1, 14-27.	0.5	23
108	Energetics of Grainâ€Boundary Triple Junctions and Cornerâ€Twinned Junctions: Transmission Electron Microscope Studies. Journal of Applied Physics, 1968, 39, 5557-5566.	1.1	22

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109	Title is missing!. Journal of Materials Science Letters, 2002, 21, 361-366.	0.5	22
110	Contributions of Light Microscopy to Contemporary Materials Characterization: The New Directional Solidification. Metallography, Microstructure, and Analysis, 2012, 1, 45-58.	0.5	22
111	Field Ion Microscopy of Graphite Fibers. Journal of Applied Physics, 1971, 42, 3487-3493.	1.1	21
112	Dynamic recrystallization in the shaped charge regime. Scripta Metallurgica Et Materialia, 1993, 29, 567-572.	1.0	21
113	Microstructures and Nanostructures for Environmental Carbon Nanotubes and Nanoparticulate Soots. International Journal of Environmental Research and Public Health, 2008, 5, 321-336.	1.2	21
114	Nanoparticulate materials in antiquity: The good, the bad and the ugly. Materials Characterization, 2009, 60, 261-270.	1.9	21
115	Effects of the source of chloride ion and surface corrosion patterns on the kinetics of the copper-aluminum cementation system. Hydrometallurgy, 1978, 3, 249-263.	1.8	20
116	Residual microstructures in explosively formed tantalum penetrators. Scripta Metallurgica Et Materialia, 1994, 31, 297-302.	1.0	20
117	Deformation effects in shocked metals and alloys. Materials Science and Technology, 2006, 22, 438-452.	0.8	20
118	Open-Cellular Co-Base and Ni-Base Superalloys Fabricated by Electron Beam Melting. Materials, 2011, 4, 782-790.	1.3	20
119	Contrast phenomena and the identification of grain boundary ledges. Metallography, 1978, 11, 61-79.	0.4	19
120	Characterization of micro and nano two-phase regimes created by explosive shock-wave consolidation of powder mixtures. Materials Characterization, 2008, 59, 1152-1160.	1.9	19
121	Microstructures and properties of solid and reticulated mesh components of pure iron fabricated by electron beam melting. Journal of Materials Research and Technology, 2013, 2, 376-385.	2.6	19
122	A continuously pumped ultra-high vacuum-sorption system for the preparation of highly ordered single-crystal metal foils. British Journal of Applied Physics, 1964, 15, 1511-1515.	0.7	18
123	Microstructural and mechanical property evaluation of black-chrome coated solar collectors â€" II. Solar Energy Materials and Solar Cells, 1981, 4, 333-358.	0.4	18
124	Calibration and Use of an Electron Microscope for Precision Micromeasurements in Thin Film Materials. Physica Status Solidi (B): Basic Research, 1967, 19, 7-34.	0.7	17
125	Structure and hardness of explosively consolidated molybdenum. Materials Science and Engineering, 1983, 57, 107-111.	0.1	17
126	Torque-related lamellar carbide growth associated with annealing twins in 304 stainless steel. Acta Metallurgica Et Materialia, 1995, 43, 461-469.	1.9	17

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127	Carbon nanotubes and other fullerenes produced from tire powder injected into an electric arc. Materials Characterization, 2005, 55, 371-377.	1.9	17
128	The role of point defects in the thermal recovery of shock-loaded metals and alloys. Scripta Metallurgica, 1970, 4, 183-187.	1.2	16
129	The influence of grain boundary ledge density on the flow stress in nickel. Materials Science and Engineering, 1978, 33, 69-80.	0.1	16
130	Microstructural and mechanical property evaluation of black-chrome coated solar collectors. Solar Energy Materials and Solar Cells, 1979, 2, 177-199.	0.4	16
131	Explosive shock deformation of metallic glasses. Materials Science and Engineering, 1981, 49, 57-64.	0.1	16
132	CHARACTERIZATION AND COMPARISON OF SPECIATED ATMOSPHERIC CARBONACEOUS PARTICULATES AND THEIR POLYCYCLIC AROMATIC HYDROCARBON CONTENTS IN THE CONTEXT OF THE PASO DEL NORTE AIRSHED ALONG THE U.S.-MEXICO BORDER. Polycyclic Aromatic Compounds, 2007, 27, 361-400.	1.4	16
133	Thermal recovery of explosive shock-loaded Ni, TD-Ni, Chromel-A, Inconel 600 and TD-NiCr. Acta Metallurgica, 1970, 18, 1047-1052.	2.1	15
134	Relative interfacial free energy measurements in Cu and Cu-Al alloys. Physica Status Solidi A, 1970, 3, 447-455.	1.7	15
135	Measurement of absolute interfacial free energies in a NiCr alloy. Surface Science, 1971, 26, 184-196.	0.8	15
136	Effects of substrate temperature, pressure, and high evaporation rates on nucleation, epitaxy, and structure of palladium thin films. Thin Solid Films, 1971, 7, 101-115.	0.8	15
137	Microstructural characterization of TiB2 armor targets. Journal of Materials Science Letters, 2002, 21, 1661-1666.	0.5	15
138	Solid-state flow, mechanical alloying, and melt-related phenomena for [001] single-crystal W ballistic rod penetrators interacting with steel targets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 301-313.	2.6	15
139	Stability comparison of simulated double-walled carbon nanotube structures. Carbon, 2008, 46, 2083-2095.	5.4	15
140	A field-ion microscope study of vapour-deposited platinum. Thin Solid Films, 1972, 9, 241-256.	0.8	14
141	Vacancies and vacancy clusters in shockâ€loaded molybdenum: Direct observations by transmission electron and fieldâ€ion microscopy. Applied Physics Letters, 1976, 28, 432-434.	1.5	14
142	Observations of solution transport, permeability, and leaching reactions in large, controlled, copper-bearing waste bodies. Hydrometallurgy, 1979, 5, 67-93.	1.8	14
143	Deformation-induced microstructure and martensite effects on transgranular carbide precipitation in type 304 stainless steels. Acta Metallurgica Et Materialia, 1993, 41, 2589-2600.	1.9	14
144	Scanning electron microscope study of laserâ€damaged beryllium thin films. Journal of Applied Physics, 1973, 44, 1722-1726.	1.1	13

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145	Fundamental studies of the structure and growth of electrodeposited nickel. Thin Solid Films, 1976, 37, 387-406.	0.8	13
146	An Electron Microscopic Study of Nucleation and Growth in Electrochemical Displacement Reactions: A Comparison of the Cu/Fe and Cu/Al Cementation Systems. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1978, 9, 515-525.	0.5	13
147	Kinetics of leaching chalcopyrite-bearing waste rock with thermophilic and mesophilic bacteria. Hydrometallurgy, 1980, 5, 337-354.	1.8	13
148	Interfacial phenomena and microstructural connectivity in explosively fabricated Y-Ba-Cu-O superconductors. Journal of Superconductivity and Novel Magnetism, 1988, 1, 3-19.	0.5	13
149	The role of grainâ€boundary structure in shockâ€induced spallation of molybdenum. Journal of Applied Physics, 1976, 47, 1364-1369.	1.1	12
150	Observations of a natural thermophilic microorganism in the leaching of a large, experimental, copper-bearing waste body. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1979, 10, 523-531.	0.5	12
151	Microstructural and mechanical property evaluation of zinc oxide coated solar collectors. Solar Energy Materials and Solar Cells, 1981, 4, 309-332.	0.4	12
152	Î±1-Martensite morphology in shock-loaded type 304 stainless steel. Scripta Metallurgica, 1982, 16, 713-716.	1.2	12
153	Preparation of superconducting YBa2Cu3O7?x powders by a solution technique. Journal of Materials Science: Materials in Electronics, 1992, 3, 181-186.	1.1	12
154	Measuring hypervelocity impact velocity from micrometeoroid crater geometry. International Journal of Impact Engineering, 1994, 15, 785-795.	2.4	12
155	Deformation and deformation-specific microstructures associated with a hypervelocity impact crater in copper. Journal of Materials Science Letters, 1995, 14, 685.	0.5	12
156	Collection and characterization of airborne nanoparticulates. Materials Characterization, 2004, 52, 1-14.	1.9	12
157	TEM observations of a 30 million year old mountain leather nanofiber mineral composite. Materials Characterization, 2005, 54, 458-465.	1.9	12
158	Correlating impact related residual microstructures through 2D computer simulations and microindentation hardness mapping: Review. Materials Science and Technology, 2012, 28, 1108-1126.	0.8	12
159	Investigation of grain boundary energetics in Er₂O₃ thin foils by transmission electron microscopy. Physica Status Solidi (B): Basic Research, 1968, 25, 629-640.	0.7	11
160	Residual crystallinity of vapor-deposited tin films. Thin Solid Films, 1974, 20, 81-89.	0.8	11
161	Bacterial attachment to molybdenite: An electron microscope study. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1975, 6, 488-490.	0.5	11
162	Characterization of selective solar absorber microstructures: Electron microscope studies. Thin Solid Films, 1980, 72, 111-120.	0.8	11

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163	The effect of polycrystallinity on the shock wave response of Fe-34.5wt.%Ni and Fe-15wt.%Cr-15wt.%Ni. Materials Science and Engineering, 1983, 57, 113-126.	0.1	11
164	Effect of uniaxial deformation to 50% on the sensitization process in 316 stainless steel. Materials Characterization, 2004, 53, 79-82.	1.9	11
165	Characterization of 3-phase (ternary-like) n-type and p-type thermoelectric materials fabricated by explosive (shock-wave) consolidation. Materials Characterization, 2008, 59, 1258-1272.	1.9	11
166	Comparative microstructures and cytotoxicity assays for ballistic aerosols composed of micrometals and nanometals: respiratory health implications. International Journal of Nanomedicine, 2011, 6, 167.	3.3	11
167	Shock-Wave Consolidation of Nanostructured Bismuth Telluride Powders. Journal of Electronic Materials, 2012, 41, 1595-1600.	1.0	11
168	Electron-beam additive manufacturing of high-temperature metals. MRS Bulletin, 2016, 41, 752-757.	1.7	11
169	The detection and analysis of particulates in municipal water supplies by transmission electron microscopy. Water Research, 1976, 10, 469-477.	5.3	10
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