Sankaranarayanan Seetharaman

List of Publications by Year
in descending order

269	11,144	28190	45213
papers	citations	55 h-index	90 g-index

279	279	279	4284
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Properties and deformation behaviour of Mgâ€“Y2O3 nanocomposites. Acta Materialia, 2007, 55, 5115-5121.	3.8	391
2	Magnesium-based nanocomposites: Lightweight materials of the future. Materials Characterization, 2015, 105, 30-46.	1.9	313
3	Development of high performance magnesium nano-composites using nano-Al2O3 as reinforcement. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 392, 163-168.	2.6	282
4	Development of novel carbon nanotube reinforced magnesium nanocomposites using the powder metallurgy technique. Nanotechnology, 2006, 17, 7-12.	1.3	261
5	Enhancing overall mechanical performance of metallic materials using two-directional microwave assisted rapid sintering. Scripta Materialia, 2005, 52, 479-483.	2.6	236
6	Simultaneous enhancement in strength and ductility by reinforcing magnesium with carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 153-156.	2.6	219
7	Development of ductile magnesium composite materials using titanium as reinforcement. Journal of Alloys and Compounds, 2002, 345, 246-251.	2.8	201
8	Ductility improvement and fatigue studies in Mg-CNT nanocomposites. Composites Science and Technology, 2008, 68, 1432-1439.	3.8	196
9	Development of Mg/Cu nanocomposites using microwave assisted rapid sintering. Composites Science and Technology, 2007, 67, 1541-1552.	3.8	184
10	Title is missing!. Journal of Materials Science, 2000, 35, 2155-2165.	1.7	182
11	Improving mechanical properties of magnesium using nano-yttria reinforcement and microwave assisted powder metallurgy method. Composites Science and Technology, 2007, 67, 2657-2664.	3.8	176
12	Mechanical Properties of Magnesium-Rare Earth Alloy Systems: A Review. Metals, 2015, 5, 1-39.	1.0	164
13	Effect of particulate size of Al2O3 reinforcement on microstructure and mechanical behavior of solidification processed elemental Mg. Journal of Alloys and Compounds, 2006, 419, 84-90.	2.8	150
14	Increasing significantly the failure strain and work of fracture of solidification processed AZ31B using nano-Al2O3 particulates. Journal of Alloys and Compounds, 2008, 459, 244-250.	2.8	150
15	Mg-based composite reinforced by Mg2Si. Composites Science and Technology, 2003, 63, 627-632.	3.8	146
16	Enhancing compressive response of AZ31B magnesium alloy using alumina nanoparticulates. Composites Science and Technology, 2008, 68, 2185-2192.	3.8	139
17	Enhancing physical and mechanical properties of Mg using nanosized Al2O3 particulates as reinforcement. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 2253-2258.	1.1	126
18	Enhancing strength and ductility of magnesium by integrating it with aluminum nanoparticles. Acta Materialia, 2007, 55, 6338-6344.	3.8	126

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19	Effect of different types of nano-size oxide particulates on microstructural and mechanical properties of elemental Mg. Journal of Materials Science, 2006, 41, 2229-2236.	1.7	122
20	Hierarchical magnesium nano-composites for enhanced mechanical response. Acta Materialia, 2010, 58, 6104-6114.	3.8	114
21	An Insight into Evolution of Light Weight High Entropy Alloys: A Review. Metals, 2016, 6, 199.	1.0	114
22	Dry sliding wear behaviour of zinc oxide reinforced magnesium matrix nano-composites. Materials & Design, 2014, 58, 475-481.	5.1	111
23	Slurry erosion characteristics and erosion mechanisms of stainless steel. Tribology International, 2014, 79, 1-7.	3.0	105
24	Effect of reinforcement concentration on the properties of hot extruded Al-Al2O3 composites synthesized through microwave sintering process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 696, 60-69.	2.6	104
25	Influence of processing parameters during disintegrated melt deposition processing on near net shape synthesis of aluminium based metal matrix composites. Materials Science and Technology, 1999, 15, 1139-1146.	0.8	103
26	Development of a novel magnesium/nickel composite with improved mechanical properties. Journal of Alloys and Compounds, 2002, 335, L10-L15.	2.8	103
27	Progress in research on hybrid metal matrix composites. Journal of Alloys and Compounds, 2020, 838, 155274.	2.8	103
28	Development of a novel magnesiumâ€“copper based composite with improved mechanical properties. Materials Research Bulletin, 2002, 37, 377-389.	2.7	101
29	An insight into ignition factors and mechanisms of magnesium based materials: A review. Materials and Design, 2017, 113, 84-98.	3.3	101
30	Interface tailoring to enhance mechanical properties of carbon nanotube reinforced magnesium composites. Materials & Design, 2014, 60, 490-495.	5.1	97
31	Development of high strength magnesium copper based hybrid composites with enhanced tensile properties. Materials Science and Technology, 2003, 19, 253-259.	0.8	88
32	Enhancing overall tensile and compressive response of pure Mg using nano-TiB2 particulates. Materials Characterization, 2014, 94, 178-188.	1.9	82
33	Development of high performance Mgâ€“TiO2 nanocomposites targeting for biomedical/structural applications. Materials & Design, 2015, 65, 104-114.	5.1	82
34	Title is missing!. Journal of Materials Science, 2002, 37, 2467-2474.	1.7	80
35	Effect of impact angle and testing time on erosion of stainless steel at higher velocities. Wear, 2014, 321, 87-93.	1.5	80
36	Effect of type of primary processing on the microstructure, CTE and mechanical properties of magnesium/alumina nanocomposites. Composite Structures, 2006, 72, 19-26.	3.1	75

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37	Enhancing compressive response of AZ31B using nano-Al2O3 and copper additions. Journal of Alloys and Compounds, 2010, 490, 382-387.	2.8	73
38	Simultaneously Improving Strength and Ductility of Magnesium using Nano-size SiC Particulates and Microwaves. Advanced Engineering Materials, 2006, 8, 735-740.	1.6	71
39	The mechanical behavior of magnesium alloy AZ91 reinforced with fine copper particulates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 369, 302-308.	2.6	69
40	Enhancing strength and ductility of Mg/SiC composites using recrystallization heat treatment. Composite Structures, 2006, 72, 266-272.	3.1	68
41	Investigation into tensile and compressive responses of Mgâ€“ZnO composites. Materials Science and Technology, 2012, 28, 582-588.	0.8	68
42	Enhancing compressive, tensile, thermal and damping response of pure Al using BN nanoparticles. Journal of Alloys and Compounds, 2018, 762, 398-408.	2.8	68
43	Enhancing the hardness/compression/damping response of magnesium by reinforcing with biocompatible silica nanoparticulates. International Journal of Materials Research, 2016, 107, 1091-1099.	0.1	67
44	High-temperature tensile properties of Mg/Al2O3 nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 486, 56-62.	2.6	66
45	Structural and mechanical properties of Ni60Nb40 amorphous alloy particle reinforced Al-based composites produced by microwave-assisted rapid sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 581, 119-127.	2.6	66
46	Nano-ZnO particle addition to monolithic magnesium for enhanced tensile and compressive response. Journal of Alloys and Compounds, 2014, 615, 211-219.	2.8	66
47	Synthesis and mechanical behavior of carbon nanotubeâ€“magnesium composites hybridized with nanoparticles of alumina. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 466, 32-37.	2.6	65
48	Development of high performance Mgâ€“Al2O3composites containing Al2O3in submicron length scale using microwave assisted rapid sintering. Materials Science and Technology, 2005, 21, 1063-1070.	0.8	64
49	Simultaneous Enhancement of Tensile/Compressive Strength and Ductility of Magnesium Alloy AZ31 Using Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 956-964.	0.9	62
50	Nano-AlN particle reinforced Mg composites: Microstructural and mechanical properties. Materials Science and Technology, 2015, 31, 1122-1131.	0.8	62
51	Additive manufacturing of magnesiumâ€“zincâ€“zirconium (ZK) alloys via capillary-mediated binderless three-dimensional printing. Materials and Design, 2019, 169, 107683.	3.3	62
52	Synthesis and characterization of high performance low volume fraction TiC reinforced Mg nanocomposites targeting biocompatible/structural applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 306-315.	2.6	61
53	Aluminum and Magnesium Metal Matrix Nanocomposites. Engineering Materials, 2017, , .	0.3	61
54	Enhancing thermal and mechanical response of aluminum using nanolength scale TiC ceramic reinforcement. Ceramics International, 2018, 44, 9247-9254.	2.3	61

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55	Structural, mechanical and thermal characteristics of Al-Cu-Li particle reinforced Al-matrix composites synthesized by microwave sintering and hot extrusion. Composites Part B: Engineering, 2019, 164, 485-492.	5.9	60
56	Investigation on dry sliding wear behavior of Mg/BN nanocomposites. Journal of Magnesium and Alloys, 2018, 6, 263-276.	5.5	59
57	Improving Overall Mechanical Performance of Magnesium Using Nanoâ€Alumina Reinforcement and Energy Efficient Microwave Assisted Processing Route. Advanced Engineering Materials, 2007, 9, 902-909.	1.6	57
58	Effect of ball milling the hybrid reinforcements on the microstructure and mechanical properties of Mgâ€“(Ti +n-Al2O3) composites. Journal of Alloys and Compounds, 2011, 509, 7229-7237.	2.8	57
59	Synthesis and Characterization of Nano Boron Nitride Reinforced Magnesium Composites Produced by the Microwave Sintering Method. Materials, 2013, 6, 1940-1955.	1.3	57
60	Development of novel Mgâ€“Ni60Nb40 amorphous particle reinforced composites with enhanced hardness and compressive response. Materials & Design, 2014, 53, 849-855.	5.1	56
61	Effect of length scale of Al2O3 particulates on microstructural and tensile properties of elemental Mg. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 425, 22-27.	2.6	55
62	Microstructure and Mechanical Characteristics of AZ31B/Al2O3 Nanocomposite with Addition of Ca. Journal of Composite Materials, 2009, 43, 5-17.	1.2	55
63	Effect of nanoscale boron carbide particle addition on the microstructural evolution and mechanical response of pure magnesium. Materials & Design, 2014, 56, 428-436.	5.1	55
64	Low volume fraction nano-titanium particulates for improving the mechanical response of pure magnesium. Journal of Alloys and Compounds, 2014, 593, 176-183.	2.8	55
65	Development of hybrid Mg/Al2O3 composites with improved properties using microwave assisted rapid sintering route. Journal of Materials Science, 2005, 40, 3395-3402.	1.7	54
66	Effect of Ag and Cu trace additions on the microstructural evolution and mechanical properties of Mgâ€“5Sn alloy. Journal of Alloys and Compounds, 2013, 565, 56-65.	2.8	54
67	Significantly Enhancing the Ignition/Compression/Damping Response of Monolithic Magnesium by Addition of Sm2O3 Nanoparticles. Metals, 2017, 7, 357.	1.0	52
68	A study on the effect of low-cost eggshell reinforcement on the immersion, damping and mechanical properties of magnesiumâ€“zinc alloy. Composites Part B: Engineering, 2020, 182, 107650.	5.9	52
69	Reinforcements at nanometer length scale and the electrical resistivity of lead-free solders. Journal of Alloys and Compounds, 2009, 478, 458-461.	2.8	51
70	Development of magnesium/(yttria+nickel) hybrid nanocomposites using hybrid microwave sintering: Microstructure and tensile properties. Journal of Alloys and Compounds, 2009, 487, 76-82.	2.8	51
71	Improved properties of Alâ€“Si₃N₄ nanocomposites fabricated through a microwave sintering and hot extrusion process. RSC Advances, 2017, 7, 34401-34410.	1.7	51
72	Development of lead-free Sn-3.5Ag/SnO2 nanocomposite solders. Journal of Materials Science: Materials in Electronics, 2009, 20, 571-576.	1.1	49

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73	Carbon nanotube addition to concentrated magnesium alloy AZ81: Enhanced ductility with occasional significant increase in strength. Materials & Design, 2013, 45, 15-23.	5.1	49
74	An investigation into interaction between magnesium powder and Ar gas: Implications for selective laser melting of magnesium. Powder Technology, 2018, 333, 252-261.	2.1	49
75	Development of high performance magnesium composites using Ni50Ti50 metallic glass reinforcement and microwave sintering approach. Journal of Alloys and Compounds, 2015, 627, 192-199.	2.8	48
76	Title is missing!. Journal of Materials Science, 2000, 35, 5553-5561.	1.7	47
77	Lanthanum effect on improving CTE, damping, hardness and tensile response of Mg-3Al alloy. Journal of Alloys and Compounds, 2017, 695, 3612-3620.	2.8	47
78	Enhancing the Ignition, Hardness and Compressive Response of Magnesium by Reinforcing with Hollow Glass Microballoons. Materials, 2017, 10, 997.	1.3	47
79	Enhancement of thermal, mechanical, ignition and damping response of magnesium using nano-ceria particles. Ceramics International, 2018, 44, 15035-15043.	2.3	47
80	A paradigm shift towards compositionally zero-sum binderless 3D printing of magnesium alloys via capillary-mediated bridging. Acta Materialia, 2019, 165, 294-306.	3.8	47
81	Adding carbon nanotubes and integrating with AA5052 aluminium alloy core to simultaneously enhance stiffness, strength and failure strain of AZ31 magnesium alloy. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1490-1500.	3.8	46
82	Effect of submicron size Al2O3 particulates on microstructural and tensile properties of elemental Mg. Journal of Alloys and Compounds, 2008, 457, 244-250.	2.8	45
83	Microstructural evolution and mechanical properties of Mg composites containing nano-B4C hybridized micro-Ti particulates. Materials Chemistry and Physics, 2014, 143, 1178-1190.	2.0	45
84	Effect of erbium modification on the microstructure, mechanical and corrosion characteristics of binary Mgâ€“Al alloys. Journal of Alloys and Compounds, 2015, 648, 759-770.	2.8	45
85	Processing-microstructure-mechanical properties of an Al-Cu/SiC metal matrix composite synthesized using disintegrated melt deposition technique. Materials Research Bulletin, 1995, 30, 1525-1534.	2.7	43
86	Enhancing damping of pure magnesium using nano-size alumina particulates. Materials Letters, 2005, 59, 3851-3855.	1.3	43
87	Enhancing Thermal Stability, Modulus and Ductility of Magnesium using Molybdenum as Reinforcement. Advanced Engineering Materials, 2005, 7, 250-256.	1.6	43
88	Effect of addition of mutually soluble and insoluble metallic elements on the microstructure, tensile and compressive properties of pure magnesium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 149-160.	2.6	42
89	Enhancing overall static/dynamic/damping/ignition response of magnesium through the addition of lower amounts (<2%) of yttrium. Journal of Alloys and Compounds, 2016, 689, 350-358.	2.8	42
90	On the role of nano-alumina particulate reinforcements in enhancing the oxidation resistance of magnesium alloy AZ31B. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 500, 233-237.	2.6	41

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91	Effect of individual and combined addition of micro/nano-sized metallic elements on the microstructure and mechanical properties of pure Mg. Materials & Design, 2012, 37, 274-284.	5.1	41
92	Microwave Rapid Sintering of Al-Metal Matrix Composites: A Review on the Effect of Reinforcements, Microstructure and Mechanical Properties. Metals, 2016, 6, 143.	1.0	41
93	Enhancing Mechanical Response of Monolithic Magnesium Using Nano-NiTi (Nitinol) Particles. Metals, 2018, 8, 1014.	1.0	39
94	Effect of heating rate during hybrid microwave sintering on the tensile properties of magnesium and Mg/Y2O3 nanocomposite. Journal of Alloys and Compounds, 2008, 466, 140-145.	2.8	38
95	Insight into cytotoxicity of Mg nanocomposites using MTT assay technique. Materials Science and Engineering C, 2017, 78, 647-652.	3.8	38
96	Using Microwave Energy to Synthesize Light Weight/Energy Saving Magnesium Based Materials: A Review. Technologies, 2015, 3, 1-18.	3.0	37
97	Development of high-performance quaternary LPSO Mgâ€“Yâ€“Znâ€“Al alloys by Disintegrated Melt Deposition technique. Materials and Design, 2015, 83, 443-450.	3.3	36
98	Achieving ultra-high strength and good ductility in AZ61 alloy composites containing hybrid micron SiC and carbon nanotubes reinforcements. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138447.	2.6	36
99	Microstructure and Grain Growth Behavior of an Aluminum Alloy Metal Matrix Composite Processed by Disintegrated Melt Deposition. Journal of Materials Engineering and Performance, 1999, 8, 473-478.	1.2	35
100	Synthesis and properties of light weight magnesiumâ€“cenosphere composite. Materials Science and Technology, 2016, 32, 923-929.	0.8	35
101	Enhancing the tensile and ignition response of monolithic magnesium by reinforcing with silica nanoparticulates. Journal of Materials Research, 2017, 32, 2169-2178.	1.2	35
102	Significantly enhancing the strengthÂ+ ductility combination of Mg-9Al alloy using multi-walled carbon nanotubes. Journal of Alloys and Compounds, 2019, 790, 974-982.	2.8	35
103	Tensile and Compressive Responses of Ceramic and Metallic Nanoparticle Reinforced Mg Composites. Materials, 2013, 6, 1826-1839.	1.3	34
104	Magnesium-iron micro-composite for enhanced shielding of electromagnetic pollution. Composites Part B: Engineering, 2019, 163, 150-157.	5.9	33
105	Designing highly ductile magnesium alloys: current status and future challenges. Critical Reviews in Solid State and Materials Sciences, 2022, 47, 194-281.	6.8	33
106	Metallic Amorphous Alloy Reinforcements in Light Metal Matrices. SpringerBriefs in Materials, 2015, , .	0.1	32
107	Utilizing Lowâ€Cost Eggshell Particles to Enhance the Mechanical Response of Mgâ€“2.5Zn Magnesium Alloy Matrix. Advanced Engineering Materials, 2018, 20, 1700919.	1.6	32
108	Development of rare-earth oxide reinforced magnesium nanocomposites for orthopaedic applications: A mechanical/immersion/biocompatibility perspective. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 114, 104162.	1.5	32

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109	Effect of extrusion ratio on microstructure and mechanical properties of microwave-sintered magnesium and Mg/Y2O3 nanocomposite. Journal of Materials Science, 2008, 43, 4503-4511.	1.7	31
110	Effect of hybridizing micron-sized Ti with nano-sized SiC on the microstructural evolution and mechanical response of Mgâ€“5.6Ti composite. Journal of Alloys and Compounds, 2013, 575, 207-217.	2.8	31
111	Tailoring the tensile/compressive response of magnesium alloy ZK60A using Al2O3 nanoparticles. Journal of Materials Science, 2010, 45, 1170-1178.	1.7	30
112	A strong and deformable in-situ magnesium nanocomposite igniting above 1000â€‰Â°C. Scientific Reports, 2018, 8, 7038.	1.6	30
113	Effect of dilution on micro hardness of Niâ€“Crâ€“Bâ€“Si alloy hardfaced on austenitic stainless steel plate for sodium-cooled fast reactor applications. Nuclear Engineering and Technology, 2020, 52, 589-596.	1.1	30
114	Mg/BN nanocomposites: Nano-BN addition for enhanced room temperature tensile and compressive response. Journal of Composite Materials, 2015, 49, 3045-3055.	1.2	29
115	Investigating influence of hybrid (yttria + copper) nanoparticulate reinforcements on microstructural development and tensile response of magnesium. Materials Science and Technology, 2010, 26, 87-94.	0.8	28
116	Effect of sintering techniques on the microstructure and tensile properties of nano-yttria particulates reinforced magnesium nanocomposites. Journal of Alloys and Compounds, 2011, 509, 4341-4347.	2.8	28
117	Effect of niobium particulate addition on the microstructure and mechanical properties of pure magnesium. Journal of Alloys and Compounds, 2012, 513, 202-207.	2.8	28
118	Powder metallurgy hollow fly ash cenospheresâ€™ particles reinforced magnesium composites. Powder Metallurgy, 2016, 59, 188-196.	0.9	28
119	Enhanced (X-band) microwave shielding properties of pure magnesium by addition of diamagnetic titanium micro-particulates. Journal of Alloys and Compounds, 2019, 770, 473-482.	2.8	28
120	Influence of nano-alumina and sub-micron copper on mechanical properties of magnesium alloy AZ31. Composites Part B: Engineering, 2013, 55, 486-491.	5.9	26
121	Introducing Mg-4Zn-3Gd-1Ca/ZnO nanocomposite with compressive strengths matching/exceeding that of mild steel. Scientific Reports, 2016, 6, 32395.	1.6	26
122	Enhancing the Properties of Magnesium using SiC Particulates in Sub-micron Length Scale. Advanced Engineering Materials, 2004, 6, 957-964.	1.6	25
123	Enhancing tensile and compressive strengths of magnesium using nanosize (Al₂O₃â€‰+â€‰Cu) hybrid reinforcements. Journal of Composite Materials, 2012, 46, 1879-1887.	1.2	25
124	Review on mechanical properties of magnesium (nano)composites developed using energy efficient microwaves. Powder Metallurgy, 2015, 58, 183-192.	0.9	25
125	Microwave Synthesis and Characterization of Magnesium Based Composites Containing Nanosized SiC and Hybrid (SiC+Al2O3) Reinforcements. Journal of Engineering Materials and Technology, Transactions of the ASME, 2007, 129, 194-199.	0.8	24
126	Enhancing mechanical response of AZ31B using Cu+nano-Al2O3 addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1411-1416.	2.6	24

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127	Influence of Micron-Ti and Nano-Cu Additions on the Microstructure and Mechanical Properties of Pure Magnesium. Metals, 2012, 2, 274-291.	1.0	24
128	Investigations on different hardfacing processes for High temperature applications of Ni-Cr-B-Si alloy hardfaced on austenitic stainless steel components. Journal of Materials Research and Technology, 2020, 9, 10062-10072.	2.6	24
129	Effects of Primary Processing Techniques and Significance of Hall-Petch Strengthening on the Mechanical Response of Magnesium Matrix Composites Containing TiO2 Nanoparticulates. Nanomaterials, 2015, 5, 1256-1283.	1.9	23
130	The dynamic compressive response of a high-strength magnesium alloy and its nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 702, 65-72.	2.6	23
131	Processing, microstructure, and properties of Mgâ€“SiC composites synthesised using fluxless casting process. Materials Science and Technology, 2001, 17, 823-832.	0.8	22
132	Enhancing modulus and ductility of Mg/SiC composite through judicious selection of extrusion temperature and heat treatment. Materials Science and Technology, 2003, 19, 803-808.	0.8	22
133	Processing and Properties of Aluminum and Magnesium Based Composites Containing Amorphous Reinforcement: A Review. Metals, 2015, 5, 743-762.	1.0	22
134	A study of the dynamic compressive response of AZ31/Al2O3 nanocomposites and the influence of nanoparticles. International Journal of Impact Engineering, 2016, 89, 114-123.	2.4	22
135	Evolution of texture and asymmetry and its impact on the fatigue behaviour of an in-situ magnesium nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 727, 61-69.	2.6	22
136	Effect of presence and type of particulate reinforcement on the electrical conductivity of non-heat treatable aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 219, 133-141.	2.6	21
137	Emerging Environment Friendly, Magnesium-Based Composite Technology for Present and Future Generations. Jom, 2016, 68, 1890-1901.	0.9	21
138	Revealing modification mechanism of Mg2Si in Sb modified Mg2Si/ AZ91 composites and its effect on mechanical properties. Journal of Alloys and Compounds, 2021, 850, 156877.	2.8	21
139	Strengthening due to the in-situ evolution of ÃŸ1â€² Mg-Zn rich phase in a ZnO nanoparticles introduced Mg-Y alloy. Scripta Materialia, 2017, 133, 29-32.	2.6	20
140	Compressive deformation behavior of Mg and Mg/(Y2O3+Ni) nanocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5550-5556.	2.6	19
141	Fatigue crack growth behavior of amorphous particulate reinforced composites. Composite Structures, 2016, 153, 782-790.	3.1	19
142	Influence of Cerium on the Deformation and Corrosion of Magnesium. Journal of Engineering Materials and Technology, Transactions of the ASME, 2016, 138, .	0.8	19
143	Enhancing the Hardness and Compressive Response of Magnesium Using Complex Composition Alloy Reinforcement. Metals, 2018, 8, 276.	1.0	19
144	Towards additive manufacturing of magnesium alloys through integration of binderless 3D printing and rapid microwave sintering. Additive Manufacturing, 2019, 29, 100790.	1.7	19

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145	Superior ductility in magnesium alloy-based nanocomposites: the crucial role of texture induced by nanoparticles. Journal of Materials Science, 2019, 54, 8711-8718.	1.7	19
146	Hot deformation behavior and processing maps of hybrid SiC and CNTs reinforced AZ61 alloy composite. Journal of Alloys and Compounds, 2021, 868, 159098.	2.8	19
147	Microstructure and mechanical properties of elemental and reinforced magnesium synthesized using a fluxless liquid-phase process. Materials Research Bulletin, 1999, 34, 1201-1214.	2.7	18
148	Effect of nano-Al2O3 addition and heat treatment on the microstructure and mechanical properties of Mg-(5.6Ti+3Al) composite. Materials Characterization, 2013, 75, 150-164.	1.9	18
149	Effect of homogenization on enhancing the failure strain of high strength quaternary LPSO Mgâ€“Yâ€“Znâ€“Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 405-412.	2.6	18
150	Using hybrid reinforcement methodology to enhance overall mechanical performance of pure magnesium. Journal of Materials Science, 2005, 40, 2875-2882.	1.7	17
151	Simultaneous effect of nano-Al₂O₃ and micrometre Cu particulates on microstructure and mechanical properties of magnesium alloy AZ31. Materials Science and Technology, 2012, 28, 227-233.	0.8	17
152	Hybridizing micro-Ti with nano-B4C particulates to improve the microstructural and mechanical characteristics of Mgâ€“Ti composite. Journal of Magnesium and Alloys, 2014, 2, 13-19.	5.5	17
153	Microstructure-sensitive investigation on the plastic deformation and damage initiation of amorphous particles reinforced composites. Composite Structures, 2016, 142, 130-139.	3.1	17
154	Micromechanics and indentation creep of magnesium carbon nanotube nanocomposites: 298ÂKâ€“573ÂK. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140418.	2.6	17
155	Damping characterization of magnesium based composites using an innovative circle-fit approach. Composites Science and Technology, 2003, 63, 559-568.	3.8	16
156	The Cyclic Deformation Behavior of Mgâ€”Y2O3 Nanocomposites. Journal of Composite Materials, 2008, 42, 2039-2050.	1.2	16
157	Mechanical characteristics of pure Mg and a Mg/Y2O3 nanocomposite in the 25â€“250ÂÂ°C temperature range. Journal of Materials Science, 2010, 45, 3058-3066.	1.7	16
158	Nano-ZnO Particlesâ€™ Effect in Improving the Mechanical Response of Mg-3Al-0.4Ce Alloy. Metals, 2016, 6, 276.	1.0	16
159	Magnesium nanocomposites: An overview on time-dependent plastic (creep) deformation. Defence Technology, 2019, 15, 123-131.	2.1	16
160	Fe3O4 Nanoparticle-Reinforced Magnesium Nanocomposites Processed via Disintegrated Melt Deposition and Turning-Induced Deformation Techniques. Metals, 2019, 9, 1225.	1.0	16
161	Fracture of magnesium matrix nanocomposites - A review. International Journal of Lightweight Materials and Manufacture, 2021, 4, 67-98.	1.3	16
162	Development of nano-ZrO₂ reinforced magnesium nanocomposites with significantly improved ductility. Materials Science and Technology, 2007, 23, 1309-1312.	0.8	15

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163	Effect of defects on electromagnetic interference shielding effectiveness of magnesium. Journal of Materials Science: Materials in Electronics, 2018, 29, 9728-9739.	1.1	15
164	Effects of TiO2 powder morphology on the mechanical response of pure magnesium: 1D nanofibers versus 0D nanoparticulates. Journal of Alloys and Compounds, 2016, 664, 45-58.	2.8	14
165	EMI shielding of metals, alloys, and composites. , 2020, , 341-355.		14
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