Vyasaraj Manakari

List of Publications by Year
in descending order

46 papers	1,522 citations	279798 23 h-index	315739 38 g-index
48 all docs	48 docs citations	48 times ranked	1057 citing authors

#	Article	IF	Citations
1	Selective Laser Melting of Magnesium and Magnesium Alloy Powders: A Review. Metals, 2017, 7, 2.	2.3	169
2	Enhanced performance of nano-sized SiC reinforced Al metal matrix nanocomposites synthesized through microwave sintering and hot extrusion techniques. Progress in Natural Science: Materials International, 2017, 27, 606-614.	4.4	143
3	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.	5.6	104
4	Enhancing compressive, tensile, thermal and damping response of pure Al using BN nanoparticles. Journal of Alloys and Compounds, 2018, 762, 398-408.	5.5	68
5	Enhancing the hardness/compression/damping response of magnesium by reinforcing with biocompatible silica nanoparticulates. International Journal of Materials Research, 2016, 107, 1091-1099.	0.3	67
6	Dry sliding wear of epoxy/cenosphere syntactic foams. Tribology International, 2015, 92, 425-438.	5.9	65
7	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.	12.0	60
8	Significantly Enhancing the Ignition/Compression/Damping Response of Monolithic Magnesium by Addition of Sm2O3 Nanoparticles. Metals, 2017, 7, 357.	2.3	52
9	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.	12.0	52
10	Improved properties of Alâ€“Si₃N₄ nanocomposites fabricated through a microwave sintering and hot extrusion process. RSC Advances, 2017, 7, 34401-34410.	3.6	51
11	Strength retention, corrosion control and biocompatibility of Mgâ€“Znâ€“Si/HA nanocomposites. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103584.	3.1	50
12	Lanthanum effect on improving CTE, damping, hardness and tensile response of Mg-3Al alloy. Journal of Alloys and Compounds, 2017, 695, 3612-3620.	5.5	47
13	Enhancing the Ignition, Hardness and Compressive Response of Magnesium by Reinforcing with Hollow Glass Microballoons. Materials, 2017, 10, 997.	2.9	47
14	Enhancement of thermal, mechanical, ignition and damping response of magnesium using nano-ceria particles. Ceramics International, 2018, 44, 15035-15043.	4.8	47
15	Evaluation of wear resistance of magnesium/glass microballoon syntactic foams for engineering/biomedical applications. Ceramics International, 2019, 45, 9302-9305.	4.8	43
16	The Potential of Magnesium Based Materials in Mandibular Reconstruction. Metals, 2019, 9, 302.	2.3	41
17	Enhancing Mechanical Response of Monolithic Magnesium Using Nano-NiTi (Nitinol) Particles. Metals, 2018, 8, 1014.	2.3	39
18	Enhancing the tensile and ignition response of monolithic magnesium by reinforcing with silica nanoparticulates. Journal of Materials Research, 2017, 32, 2169-2178.	2.6	35

#	Article	IF	Citations
19	Using B4C Nanoparticles to Enhance Thermal and Mechanical Response of Aluminum. Materials, 2017, 10, 621.	2.9	34
20	Utilizing Lowâ€Cost Eggshell Particles to Enhance the Mechanical Response of Mgâ€“2.5Zn Magnesium Alloy Matrix. Advanced Engineering Materials, 2018, 20, 1700919.	3.5	32
21	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.	3.1	32
22	Magnesium-Î²-Tricalcium Phosphate Composites as a Potential Orthopedic Implant: A Mechanical/Damping/Immersion Perspective. Metals, 2018, 8, 343.	2.3	29
23	Using lanthanum to enhance the overall ignition, hardness, tensile and compressive strengths of Mg-0.5Zr alloy. Journal of Rare Earths, 2017, 35, 723-732.	4.8	24
24	Hollow silica reinforced magnesium nanocomposites with enhanced mechanical and biological properties with computational modeling analysis for mandibular reconstruction. International Journal of Oral Science, 2020, 12, 31.	8.6	20
25	Enhancing the Hardness and Compressive Response of Magnesium Using Complex Composition Alloy Reinforcement. Metals, 2018, 8, 276.	2.3	19
26	Synthesis and Mechanical Response of NiTi SMA Nanoparticle Reinforced Mg Composites Synthesized through Microwave Sintering Process. Materials Today: Proceedings, 2018, 5, 28203-28210.	1.8	18
27	A new method to lightweight and improve strength to weight ratio of magnesium by creating a controlled defect. Journal of Materials Research and Technology, 2020, 9, 3664-3675.	5.8	15
28	Development of Lightweight Magnesium/Glass Micro Balloon Syntactic Foams Using Microwave Approach with Superior Thermal and Mechanical Properties. Metals, 2021, 11, 827.	2.3	14
29	Improving Mechanical, Thermal and Damping Properties of NiTi (Nitinol) Reinforced Aluminum Nanocomposites. Journal of Composites Science, 2020, 4, 19.	3.0	14
30	Effect of samarium oxide nanoparticles on degradation and invitro biocompatibility of magnesium. Materials Today Communications, 2021, 26, 102171.	1.9	13
31	Effects of Hollow Fly-Ash Particles on the Properties of Magnesium Matrix Syntactic Foams: A Review. Materials Performance and Characterization, 2016, 5, MPC20150060.	0.3	12
32	Using low-temperature sinterless powder method to develop exceptionally high amount of zinc containing Mgâ€“Znâ€“Ca alloy and Mgâ€“Znâ€“Ca/SiO2 nanocomposite. Journal of Alloys and Compounds, 2021, 853, 156957.	5.5	11
33	In-Vitro Degradation of Hollow Silica Reinforced Magnesium Syntactic Foams in Different Simulated Body Fluids for Biomedical Applications. Metals, 2020, 10, 1583.	2.3	10
34	A Novel Method of Light Weighting Aluminium Using Magnesium Syntactic Composite Core. Crystals, 2020, 10, 917.	2.2	10
35	Enhancing significantly the damping response of Mg using hollow glass microspheres while simultaneously reducing weight. Advanced Materials Letters, 2017, 8, 1171-1177.	0.6	10
36	Microstructure and Mechanical Behavior of Hot Extruded Aluminum/Tin-Bismuth Composites Produced by Powder Metallurgy. Applied Sciences (Switzerland), 2020, 10, 2812.	2.5	7

#	Article	IF	Citations
37	A New Method to Lightweight Magnesium Using Syntactic Composite Core. Applied Sciences (Switzerland), 2020, 10, 4773.	2.5	6
38	Drill Hole Orientation: Its Role and Importance on the Compression Response of Pure Magnesium. Applied Sciences (Switzerland), 2020, 10, 7047.	2.5	3
39	Tensile Response of Al-Based Nanocomposites. , 2021, , 313-324.		2
40	Bioresorbable Nano-Hydroxyapatite Reinforced Magnesium Alloplastic Bone Substitute for Biomedical Applications: A Study. Minerals, Metals and Materials Series, 2019, , 71-82.	0.4	2
41	The Mechanical and Thermal Response of Shape Memory Alloy-Reinforced Aluminum Nanocomposites. Minerals, Metals and Materials Series, 2019, , 51-62.	0.4	1
42	Metal Matrix Syntactic Composites. , 2021, , 109-120.		1
43	Eco-friendly Metal Matrix Composites. , 2021, , 140-159.		1
44	Processing, microstructure and mechanical response of a shell (Magnesium) â€“ Core (MagnesiumÂ+ÂLithium) hybrid composite. Materials Today: Proceedings, 2022, , .	1.8	1
45	Development of Eco-Magnesium Based Composite with Enhanced Mechanical, Damping and Ignition Properties. Recent Patents on Engineering, 2021, 14, 348-356.	0.4	0
46	Role of Rare Earth Oxide Reinforcements in Enhancing the Mechanical, Damping and Ignition Resistance of Magnesium. Minerals, Metals and Materials Series, 2019, , 115-124.	0.4	0