Sanjay Kumar Vajpai

List of Publications by Year
in descending order

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53	1,319	394421	361022
papers	citations	19 h-index	35 g-index

56	56	56	882
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improvement of mechanical properties in SUS304L steel through the control of bimodal microstructure characteristics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 598, 106-113.	5.6	202
2	The Development of High Performance Ti-6Al-4V Alloy via a Unique Microstructural Design with Bimodal Grain Size Distribution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 903-914.	2.2	108
3	Three-dimensionally gradient harmonic structure design: an integrated approach for high performance structural materials. Materials Research Letters, 2016, 4, 191-197.	8.7	95
4	Microstructure and properties of beta Tiâ€“Nb alloy prepared by powder metallurgy route using titanium hydride powder. Journal of Alloys and Compounds, 2016, 656, 978-986.	5.5	77
5	Importance of Bimodal Structure Topology in the Control of Mechanical Properties of a Stainless Steel. Advanced Engineering Materials, 2015, 17, 791-795.	3.5	70
6	Effect of bimodal harmonic structure design on the deformation behaviour and mechanical properties of Co-Cr-Mo alloy. Materials Science and Engineering C, 2016, 58, 1008-1015.	7.3	62
7	Fabrication of multilayered Tiâ€“Al intermetallics by spark plasma sintering. Journal of Alloys and Compounds, 2014, 585, 734-740.	5.5	54
8	Application of rapid solidification powder metallurgy processing to prepare Cuâ€“Alâ€“Ni high temperature shape memory alloy strips with high strength and high ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 570, 32-42.	5.6	52
9	Microstructure and properties of Cuâ€“Alâ€“Ni shape memory alloy strips prepared via hot densification rolling of argon atomized powder preforms. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 529, 378-387.	5.6	50
10	Application of Harmonic Structure Design to Biomedical Co–Cr–Mo Alloy for Improved Mechanical Properties. Materials Transactions, 2014, 55, 99-105.	1.2	50
11	Application of High Pressure Gas Jet Mill Process to Fabricate High Performance Harmonic Structure Designed Pure Titanium. Materials Transactions, 2015, 56, 154-159.	1.2	43
12	A novel powder metallurgy processing approach to prepare fine-grained Ti-rich TiAl-based alloys from pre-alloyed powders. Intermetallics, 2013, 42, 146-155.	3.9	29
13	Harmonic structure, a promising microstructure design. Materials Research Letters, 2022, 10, 440-471.	8.7	29
14	Preparation of strong and ductile pure titanium via two-step rapid sintering of TiH2 powder. Journal of Alloys and Compounds, 2016, 683, 51-55.	5.5	26
15	Effect of cold rolling and heat-treatment on the microstructure and mechanical properties of Î²-titanium Ti-25Nb-25Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 323-328.	5.6	26
16	Bulk Niâ€“W alloys with a composite-like microstructure processed by spark plasma sintering: Microstructure and mechanical properties. Materials and Design, 2016, 89, 1181-1190.	7.0	25
17	Three-Dimensionally Gradient and Periodic Harmonic Structure for High Performance Advanced Structural Materials. Materials Transactions, 2016, 57, 1424-1432.	1.2	24
18	Studies on the mechanism of the structural evolution in Cuâ€“Alâ€“Ni elemental powder mixture during high energy ball milling. Journal of Materials Science, 2009, 44, 4334-4341.	3.7	22

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19	Effect of Harmonic Microstructure on the Corrosion Behavior of SUS304L Austenitic Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6259-6269.	2.2	22
20	Processing and Characterization of Cu-Al-Ni Shape Memory Alloy Strips Prepared from Prealloyed Powder by Hot Densification Rolling of Powder Preforms. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3178-3189.	2.2	18
21	Extra-strengthening in a harmonic structure designed pure titanium due to preferential recrystallization phenomenon through thermomechanical treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 797, 140227.	5.6	17
22	Processing and Characterization of Cu-Al-Ni Shape Memory Alloy Strips Prepared from Elemental Powders via a Novel Powder Metallurgy Route. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2905-2913.	2.2	16
23	Studies on the bulk nanocrystalline Niâ€“Feâ€“Co alloy prepared by mechanical alloyingâ€“sinteringâ€“hot rolling route. Journal of Alloys and Compounds, 2009, 476, 311-317.	5.5	15
24	A Novel Powder Metallurgy Processing Approach to Prepare Fine-Grained Cu-Al-Ni Shape-Memory Alloy Strips from Elemental Powders. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2484-2499.	2.2	15
25	High performance Ti-6Al-4V alloy by creation of harmonic structure design. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012030.	0.6	14
26	Wear Behavior of Harmonic Structured 304L Stainless Steel. Journal of Materials Engineering and Performance, 2017, 26, 2608-2618.	2.5	14
27	Preparation of nanocrystalline Niâ€“Fe strip via mechanical alloyingâ€“compactionâ€“sinteringâ€“hot rolling route. Journal of Materials Science, 2009, 44, 129-135.	3.7	13
28	Effect of Particle Size Distribution on SiC Ceramic Sinterability. Materials Transactions, 2015, 56, 1827-1833.	1.2	12
29	Structure and magnetic properties of Co 2 (Cr 1âˆ'x Fe x)Al, (0 â‰¤ x â‰¤ 1) Heusler alloys prepared by mechanical alloying. Journal of Magnetism and Magnetic Materials, 2017, 433, 141-147.	2.3	11
30	An Efficient Powder Metallurgy Processing Route to Prepare High-Performance Î²-Tiâ€“Nb Alloys Using Pure Titanium and Titanium Hydride Powders. Metals, 2018, 8, 516.	2.3	11
31	Study of magneto-structural phase transitions and magnetocaloric effects in Co-based Heusler alloys synthesized via mechanical milling. Journal of Magnetism and Magnetic Materials, 2018, 462, 195-204.	2.3	10
32	Synthesis and properties of Cuâ€“Alâ€“Ni shape memory alloy strips prepared via hot densification rolling of powder preforms. Powder Metallurgy, 2011, 54, 620-627.	1.7	9
33	Application of Al-Si Semi-Solid Reaction for Fabricating Harmonic Structured Al Based Alloy. Materials Transactions, 2016, 57, 1433-1439.	1.2	9
34	Preparation of Cuâ€“Alâ€“Ni shape memory alloy strips by spray deposition-hot rollingÂroute. Materials Science and Technology, 2020, 36, 1337-1348.	1.6	9
35	Studies on the Mechanical Alloying of Ni-Fe-Co Powders and Its Explosive Compaction. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 2725-2735.	2.2	7
36	Synthesis of Ternary Ti-25Nb-11Sn Alloy by Powder Metallurgy Route Using Titanium Hydride Powder. Materials Transactions, 2016, 57, 1440-1446.	1.2	7

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37	Harmonic Structure Design and Mechanical Properties of Pure Ni Compact. Journal of Powder Metallurgy and Mining, 2014, 03, .	0.3	6
38	Harmonic Structure Design of Co-Cr-Mo Alloy with Outstanding Mechanical Properties. Advanced Materials Research, 0, 939, 60-67.	0.3	5
39	A novel Bimodal Milling (BiM) approach to achieve harmonic structured SUS316L with controlled microstructure and outstanding mechanical performance. Powder Technology, 2022, 399, 117188.	4.2	5
40	Fabrication of Yttria Stabilized Zirconia-Silicon Carbide Composites with High Strength and High Toughness by Spark Plasma Sintering of Mechanically Milled Powders. Materials Transactions, 2014, 55, 1827-1833.	1.2	4
41	High Temperature Mechanical Properties of Harmonic Structure Designed SUS304L Austenitic Stainless Steel. Materials Science Forum, 0, 879, 2507-2511.	0.3	4
42	Harmonic structure formation and deformation behavior in a (Î± + Î³) two phase stainless steel. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012027.	0.6	3
43	Fabrication of Ti from a blend of Ti and TiH₂ powders via powder metallurgy processing. Materials and Manufacturing Processes, 2019, 34, 1745-1752.	4.7	3
44	Synthesis and characterisation of Cuâ€“W nanocomposite strips. Materials Science and Technology, 2013, 29, 285-293.	1.6	2
45	Microstructure Formation of High Pressure Torsion Processed (Î± + Î³) Two Phase Stainless Steel. Materials Science Forum, 2016, 879, 1365-1368.	0.3	2
46	Application of High-pressure gas milling process to pure Titanium for harmonic structure design. Advances in Materials and Processing Technologies, 2016, 2, 202-208.	1.4	2
47	Harmonic structure design of Ti-6Al-4V alloy by High-pressure gas milling process. Advances in Materials and Processing Technologies, 2016, 2, 192-201.	1.4	2
48	Effect of Reversible Cyclic Plastic Deformation and Thermal Treatment on the Microstructure and Mechanical Properties of SS304L Steel. Transactions of the Indian Institute of Metals, 2020, 73, 1227-1237.	1.5	2
49	Microstructure and Mechanical Behavior of Tiâ€“25Nbâ€“25Zr Alloy Prepared from Pre-Alloyed and Hydride-Mixed Elemental Powders. Materials Transactions, 2020, 61, 562-566.	1.2	2
50	Deformation mechanism of harmonic structure designed Coâ€“Crâ€“Mo alloy. Advances in Materials and Processing Technologies, 2015, 1, 610-618.	1.4	1
51	A novel microstructure design for high-performance structural materials with high strength and high ductility. Advances in Materials and Processing Technologies, 2016, 2, 548-556.	1.4	1
52	Microstructure Evolution and Deformation Mechanisms of Harmonic Structure Designed Materials. Materials Science Forum, 2016, 879, 145-150.	0.3	1
53	Effect of Particle Size Distribution on SiC Ceramic Sinterability. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 281-287.	0.2	1