

# Sanjay Kumar Vajpai

## List of Publications by Citations

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56

papers

945

citations

16

h-index

29

g-index

56

ext. papers

1,117

ext. citations

2.9

avg, IF

4.52

L-index

#	Paper	IF	Citations
56	Improvement of mechanical properties in SUS304L steel through the control of bimodal microstructure characteristics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 598, 106-113	5.3	137
55	The Development of High Performance Ti-6Al-4V Alloy via a Unique Microstructural Design with Bimodal Grain Size Distribution. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2015</b> , 46, 903-914	2.3	78
54	Microstructure and properties of beta TiNb alloy prepared by powder metallurgy route using titanium hydride powder. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 656, 978-986	5.7	66
53	Three-dimensionally gradient harmonic structure design: an integrated approach for high performance structural materials. <i>Materials Research Letters</i> , <b>2016</b> , 4, 191-197	7.4	60
52	Importance of Bimodal Structure Topology in the Control of Mechanical Properties of a Stainless Steel. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 791-795	3.5	53
51	Effect of bimodal harmonic structure design on the deformation behaviour and mechanical properties of Co-Cr-Mo alloy. <i>Materials Science and Engineering C</i> , <b>2016</b> , 58, 1008-15	8.3	51
50	Fabrication of multilayered TiAl intermetallics by spark plasma sintering. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 585, 734-740	5.7	45
49	Application of rapid solidification powder metallurgy processing to prepare CuAlNi high temperature shape memory alloy strips with high strength and high ductility. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 570, 32-42	5.3	43
48	Application of Harmonic Structure Design to Biomedical Co-Cr-Mo Alloy for Improved Mechanical Properties. <i>Materials Transactions</i> , <b>2014</b> , 55, 99-105	1.3	40
47	Microstructure and properties of CuAlNi shape memory alloy strips prepared via hot densification rolling of argon atomized powder preforms. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 529, 378-387	5.3	40
46	Application of High Pressure Gas Jet Mill Process to Fabricate High Performance Harmonic Structure Designed Pure Titanium. <i>Materials Transactions</i> , <b>2015</b> , 56, 154-159	1.3	30
45	A novel powder metallurgy processing approach to prepare fine-grained Ti-rich TiAl-based alloys from pre-alloyed powders. <i>Intermetallics</i> , <b>2013</b> , 42, 146-155	3.5	23
44	Preparation of strong and ductile pure titanium via two-step rapid sintering of TiH <sub>2</sub> powder. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 683, 51-55	5.7	21
43	Bulk NiW alloys with a composite-like microstructure processed by spark plasma sintering: Microstructure and mechanical properties. <i>Materials and Design</i> , <b>2016</b> , 89, 1181-1190	8.1	19
42	Effect of cold rolling and heat-treatment on the microstructure and mechanical properties of Titanium Ti-25Nb-25Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 736, 323-328	5.3	18
41	Studies on the mechanism of the structural evolution in CuAlNi elemental powder mixture during high energy ball milling. <i>Journal of Materials Science</i> , <b>2009</b> , 44, 4334-4341	4.3	17
40	Three-Dimensionally Gradient and Periodic Harmonic Structure for High Performance Advanced Structural Materials. <i>Materials Transactions</i> , <b>2016</b> , 57, 1424-1432	1.3	15

39	Processing and Characterization of Cu-Al-Ni Shape Memory Alloy Strips Prepared from Prealloyed Powder by Hot Densification Rolling of Powder Preforms. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 3178-3189	2.3	14
38	Processing and Characterization of Cu-Al-Ni Shape Memory Alloy Strips Prepared from Elemental Powders via a Novel Powder Metallurgy Route. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 2905-2913	2.3	14
37	Effect of Harmonic Microstructure on the Corrosion Behavior of SUS304L Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 6259-6269	2.3	13
36	High performance Ti-6Al-4V alloy by creation of harmonic structure design. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012030	0.4	13
35	A Novel Powder Metallurgy Processing Approach to Prepare Fine-Grained Cu-Al-Ni Shape-Memory Alloy Strips from Elemental Powders. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 2484-2499	2.3	13
34	Preparation of nanocrystalline Ni <sub>50</sub> Fe <sub>50</sub> strip via mechanical alloying+compaction+intering+hot rolling route. <i>Journal of Materials Science</i> , <b>2009</b> , 44, 129-135	4.3	12
33	Studies on the bulk nanocrystalline Ni <sub>50</sub> Fe <sub>50</sub> alloy prepared by mechanical alloying+intering+hot rolling route. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 476, 311-317	5.7	12
32	Extra-strengthening in a harmonic structure designed pure titanium due to preferential recrystallization phenomenon through thermomechanical treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 797, 140227	5.3	10
31	Wear Behavior of Harmonic Structured 304L Stainless Steel. <i>Journal of Materials Engineering and Performance</i> , <b>2017</b> , 26, 2608-2618	1.6	9
30	Synthesis and properties of Cu <sub>50</sub> Al <sub>50</sub> Ni shape memory alloy strips prepared via hot densification rolling of powder preforms. <i>Powder Metallurgy</i> , <b>2011</b> , 54, 620-627	1.9	9
29	Effect of Particle Size Distribution on SiC Ceramic Sinterability. <i>Materials Transactions</i> , <b>2015</b> , 56, 1827-1833	3.3	8
28	An Efficient Powder Metallurgy Processing Route to Prepare High-Performance Ti <sub>50</sub> Nb Alloys Using Pure Titanium and Titanium Hydride Powders. <i>Metals</i> , <b>2018</b> , 8, 516	2.3	8
27	Application of Al-Si Semi-Solid Reaction for Fabricating Harmonic Structured Al Based Alloy. <i>Materials Transactions</i> , <b>2016</b> , 57, 1433-1439	1.3	7
26	Synthesis of Ternary Ti-25Nb-11Sn Alloy by Powder Metallurgy Route Using Titanium Hydride Powder. <i>Materials Transactions</i> , <b>2016</b> , 57, 1440-1446	1.3	6
25	Structure and magnetic properties of Co <sub>2</sub> (Cr <sub>1-x</sub> Fe <sub>x</sub> )Al, (0 ≤ x ≤ 1) Heusler alloys prepared by mechanical alloying. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 433, 141-147	2.8	5
24	Study of magneto-structural phase transitions and magnetocaloric effects in Co-based Heusler alloys synthesized via mechanical milling. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2018</b> , 462, 195-204	2.8	5
23	Studies on the Mechanical Alloying of Ni-Fe-Co Powders and Its Explosive Compaction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 2725-2735	2.3	5
22	Fabrication of Yttria Stabilized Zirconia-Silicon Carbide Composites with High Strength and High Toughness by Spark Plasma Sintering of Mechanically Milled Powders. <i>Materials Transactions</i> , <b>2014</b> , 55, 1827-1833	1.3	4

21	Harmonic Structure Design of Co-Cr-Mo Alloy with Outstanding Mechanical Properties. <i>Advanced Materials Research</i> , <b>2014</b> , 939, 60-67	0.5	4
20	Preparation of Cu <sub>3</sub> Ni shape memory alloy strips by spray deposition-hot rolling route. <i>Materials Science and Technology</i> , <b>2020</b> , 36, 1337-1348	1.5	2
19	Harmonic Structure Design and Mechanical Properties of Pure Ni Compact. <i>Journal of Powder Metallurgy and Mining</i> , <b>2014</b> , 03,		2
18	Harmonic structure formation and deformation behavior in a (β) two phase stainless steel. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012027	0.4	2
17	Synthesis and characterisation of Cu <sub>3</sub> Ni nanocomposite strips. <i>Materials Science and Technology</i> , <b>2013</b> , 29, 285-293	1.5	2
16	Harmonic structure, a promising microstructure design. <i>Materials Research Letters</i> , <b>2022</b> , 10, 440-471	7.4	2
15	Fabrication of Ti from a blend of Ti and TiH <sub>2</sub> powders via powder metallurgy processing. <i>Materials and Manufacturing Processes</i> , <b>2019</b> , 34, 1745-1752	4.1	1
14	Microstructure Formation of High Pressure Torsion Processed (β) Two Phase Stainless Steel. <i>Materials Science Forum</i> , <b>2016</b> , 879, 1365-1368	0.4	1
13	High Temperature Mechanical Properties of Harmonic Structure Designed SUS304L Austenitic Stainless Steel. <i>Materials Science Forum</i> , <b>2016</b> , 879, 2507-2511	0.4	1
12	Application of High-pressure gas milling process to pure Titanium for harmonic structure design. <i>Advances in Materials and Processing Technologies</i> , <b>2016</b> , 2, 202-208	0.8	1
11	Harmonic structure design of Ti-6Al-4V alloy by High-pressure gas milling process. <i>Advances in Materials and Processing Technologies</i> , <b>2016</b> , 2, 192-201	0.8	1
10	Deformation mechanism of harmonic structure designed CoCrMo alloy. <i>Advances in Materials and Processing Technologies</i> , <b>2015</b> , 1, 610-618	0.8	1
9	A novel Bimodal Milling (BiM) approach to achieve harmonic structured SUS316L with controlled microstructure and outstanding mechanical performance. <i>Powder Technology</i> , <b>2022</b> , 117188	5.2	1
8	A novel microstructure design for high-performance structural materials with high strength and high ductility. <i>Advances in Materials and Processing Technologies</i> , <b>2016</b> , 2, 548-556	0.8	1
7	Microstructure Evolution and Deformation Mechanisms of Harmonic Structure Designed Materials. <i>Materials Science Forum</i> , <b>2016</b> , 879, 145-150	0.4	0
6	Effect of Particle Size Distribution on SiC Ceramic Sinterability. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , <b>2017</b> , 64, 281-287	0.2	0
5	Microstructure and Mechanical Behavior of Ti <sub>5</sub> Nb <sub>5</sub> Zr Alloy Prepared from Pre-Alloyed and Hydride-Mixed Elemental Powders. <i>Materials Transactions</i> , <b>2020</b> , 61, 562-566	1.3	0
4	Effect of Reversible Cyclic Plastic Deformation and Thermal Treatment on the Microstructure and Mechanical Properties of SS304L Steel. <i>Transactions of the Indian Institute of Metals</i> , <b>2020</b> , 73, 1227-1237 <sup>1,2</sup>		

- 3 Innovative Materials Design for High Performance Pure Titanium **2016**, 1153-1157
- 2 Fabrication of Biocompatible Ti-Nb-Sn Through Powder Metallurgy Route for Orthopedic Implants **2016**, 1691-1693
- 1 Harmonic Structure: An Effective Tailored Heterogeneous Microstructural Design to Strengthen Ti-6Al-4V Alloy **2016**, 629-635