

# Sundar V Atre

## List of Publications by Year in descending order

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60  
papers

2,765  
citations

236925

25  
h-index

175258

52  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2766  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bending behavior of 3D printed mechanically robust tubular lattice metamaterials. Additive Manufacturing, 2022, 50, 102565.	3.0	13
2	Finite Element-Based Simulation of Metal Fused Filament Fabrication Process: Distortion Prediction and Experimental Verification. Journal of Materials Engineering and Performance, 2021, 30, 5135-5149.	2.5	13
3	Process Sensitivity and Significant Parameters Investigation in Metal Fused Filament Fabrication of Ti-6Al-4V. Journal of Materials Engineering and Performance, 2021, 30, 5118-5134.	2.5	10
4	Factors affecting properties of Ti-6Al-4V alloy additive manufactured by metal fused filament fabrication. Powder Technology, 2021, 386, 9-19.	4.2	33
5	Structure and thermal stability of cellulose nanocrystal/polysulfone nanocomposites. Materials Today Communications, 2020, 22, 100797.	1.9	11
6	Metal matrix composites for fabricating tooling. International Journal of Refractory Metals and Hard Materials, 2020, 87, 105169.	3.8	2
7	Effect of Post Processing Heat Treatment Routes on Microstructure and Mechanical Property Evolution of Haynes 282 Ni-Based Superalloy Fabricated with Selective Laser Melting (SLM). Metals, 2020, 10, 629.	2.3	34
8	Printability studies of Ti-6Al-4V by metal fused filament fabrication (MF3). International Journal of Refractory Metals and Hard Materials, 2020, 91, 105249.	3.8	63
9	Laser Powder Bed Fusion. , 2020, , 209-219.		2
10	Experimentation and analysis of powder injection molded Ti10Nb10Zr alloy: a promising candidate for electrochemical and biomedical application. Journal of Materials Research and Technology, 2019, 8, 5233-5245.	5.8	10
11	Exploring Convergence of Snake-Skin-Inspired Texture Designs and Additive Manufacturing for Mechanical Traction. Procedia Manufacturing, 2019, 34, 640-646.	1.9	17
12	Effects of Nb and Mo on the microstructure and properties of 420 stainless steel processed by laser-powder bed fusion. Additive Manufacturing, 2019, 28, 682-691.	3.0	29
13	Kinetics of thermal dewaxing of injection-molded silicon carbide. International Journal of Ceramic Engineering & Science, 2019, 1, 85-91.	1.2	0
14	Microstructures, properties, and applications of laser sintered 17%PH stainless steel. Journal of the American Ceramic Society, 2019, 102, 5679-5690.	3.8	18
15	Green micromachining of ceramics using tungsten carbide micro-endmills. Journal of Materials Processing Technology, 2019, 267, 268-279.	6.3	16
16	Microstructure-property relationships of 420 stainless steel fabricated by laser-powder bed fusion. Powder Technology, 2019, 343, 738-746.	4.2	54
17	Fabrication of micro-sized piezoelectric structure using powder injection molding with separated mold system. Ceramics International, 2018, 44, 12709-12716.	4.8	17
18	Effect of binder composition on rheological behavior of PMN-PZT ceramic feedstock. Powder Technology, 2018, 330, 19-26.	4.2	23

#	ARTICLE	IF	CITATIONS
19	Effects of particle characteristics on the microstructure and mechanical properties of 17-4 PH stainless steel fabricated by laser-powder bed fusion. Powder Technology, 2018, 331, 192-203.	4.2	67
20	Effect of process parameters on the Selective Laser Melting (SLM) of tungsten. International Journal of Refractory Metals and Hard Materials, 2018, 71, 315-319.	3.8	90
21	Effects of powder characteristics and processing conditions on the corrosion performance of 17-4 PH stainless steel fabricated by laser-powder bed fusion. Progress in Additive Manufacturing, 2018, 3, 39-49.	4.8	35
22	Effects of atomizing media and post processing on mechanical properties of 17-4 PH stainless steel manufactured via selective laser melting. Additive Manufacturing, 2018, 22, 127-137.	3.0	74
23	Rheological and thermal debinding properties of blended elemental Ti-6Al-4V powder injection molding feedstock. Powder Technology, 2017, 311, 357-363.	4.2	42
24	Effects of lubricant and part geometry on the ejection characteristics during die compaction. Powder Metallurgy, 2017, 60, 337-344.	1.7	0
25	Influence of feedstock properties on the injection molding of aluminum nitride. International Journal of Advanced Manufacturing Technology, 2017, 90, 2813-2826.	3.0	7
26	Microstructural Development of Green Micro-Machined, Injection-Molded Silicon Carbide. Microscopy and Microanalysis, 2016, 22, 1818-1819.	0.4	0
27	Effects of Powder Attributes and Laser Powder Bed Fusion (L-PBF) Process Conditions on the Densification and Mechanical Properties of 17-4 PH Stainless Steel. Jom, 2016, 68, 860-868.	1.9	61
28	Powder injection molding of silicon carbide: processing issues. Metal Powder Report, 2016, 71, 460-464.	0.1	7
29	Simulations and injection molding experiments for aluminum nitride feedstock. Ceramics International, 2016, 42, 194-203.	4.8	10
30	Sintering Characteristics of a Powder Injection Molded Ceria-Stabilized Zirconiaâ€“Mullite Composite. Materials and Manufacturing Processes, 2015, 30, 616-623.	4.7	3
31	Imbalance filling of multi-cavity tooling during powder injection molding. Powder Technology, 2014, 257, 124-131.	4.2	12
32	Predicting Powder-Polymer Mixture Properties for PIM Design. Critical Reviews in Solid State and Materials Sciences, 2014, 39, 197-214.	12.3	33
33	Powder injection molding process design for UAV engine components using nanoscale silicon nitride powders. Ceramics International, 2014, 40, 893-900.	4.8	14
34	The effects of nanoparticle addition on binder removal from injection molded silicon carbide. Ceramics International, 2014, 40, 13861-13868.	4.8	8
35	Powder injection molding of a mulliteâ€“zirconia composite. Journal of Materials Research and Technology, 2013, 2, 263-268.	5.8	9
36	The effects of material attributes on powderâ€“binder separation phenomena in powder injection molding. Powder Technology, 2013, 243, 79-84.	4.2	43

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37	The effects of nanoparticle addition on binder removal from injection molded aluminum nitride. International Journal of Refractory Metals and Hard Materials, 2013, 36, 77-84.	3.8	13
38	The effects of nanoparticle addition on SiC and AlN powder-polymer mixtures: Packing and flow behavior. International Journal of Refractory Metals and Hard Materials, 2013, 36, 183-190.	3.8	36
39	Feedstock properties and injection molding simulations of bimodal mixtures of nanoscale and microscale aluminum nitride. Ceramics International, 2013, 39, 6887-6897.	4.8	42
40	Effects of lubricant on green strength, compressibility and ejection of parts in die compaction process. Powder Technology, 2013, 233, 22-29.	4.2	22
41	Review: Thermal Debinding Process in Particulate Materials Processing. Materials and Manufacturing Processes, 2012, 27, 103-118.	4.7	71
42	The effects of nanoparticle addition on the sintering and properties of bimodal AlN. Ceramics International, 2012, 38, 6495-6499.	4.8	21
43	The effects of nanoparticle addition on the densification and properties of SiC. Ceramics International, 2012, 38, 5393-5399.	4.8	17
44	Development of master sintering curve for field-assisted sintering of HfB <sub>2</sub> -20SiC. Ceramics International, 2012, 38, 4369-4372.	4.8	16
45	Taguchi analysis on the effect of process parameters on densification during spark plasma sintering of HfB <sub>2</sub> -20SiC. International Journal of Refractory Metals and Hard Materials, 2012, 31, 293-296.	3.8	22
46	Master debinding curves for solvent extraction of binders in powder injection molding. Powder Technology, 2012, 228, 14-17.	4.2	36
47	Robust, Functionalizable, Nanometer-Thick Poly(acrylic acid) Films Spontaneously Assembled on Oxidized Aluminum Substrates: Structures and Chemical Properties. Langmuir, 2011, 27, 3638-3653.	3.5	6
48	Review of Net Shape Fabrication of Thermally Conducting Ceramics. Materials and Manufacturing Processes, 2011, 26, 832-845.	4.7	27
49	Metallic nanostructures in a polymer matrix and substrate fabrication and structural characterization. Applied Physics A: Materials Science and Processing, 2011, 103, 1117-1123.	2.3	0
50	Studies on the thermal stability and degradation kinetics of Pd/PC nanocomposites. Journal of Applied Polymer Science, 2010, 118, 3602-3611.	2.6	6
51	Synthesis of Nanoparticles in High Temperature Ceramic Microreactors: Design, Fabrication and Testing. International Journal of Applied Ceramic Technology, 2009, 6, 410-419.	2.1	12
52	Effect of powders and binders on material properties and molding parameters in iron and stainless steel powder injection molding process. Powder Technology, 2009, 193, 162-169.	4.2	107
53	Synthesis and post-processing of nanomaterials using microreaction technology. Journal of Nanoparticle Research, 2008, 10, 965-980.	1.9	99
54	Nano-enabled microtechnology: polysulfone nanocomposites incorporating cellulose nanocrystals. Cellulose, 2007, 14, 577-584.	4.9	59

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55	Effect of mixing on the rheology and particle characteristics of tungsten-based powder injection molding feedstock. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 356, 337-344.	5.6	82
56	Endothelial Cell Growth and Protein Adsorption on Terminally Functionalized, Self-Assembled Monolayers of Alkanethiolates on Gold. <i>Langmuir</i> , 1997, 13, 3404-3413.	3.5	275
57	Synthesis of Crystalline, Nanometer-Scale, $(CH_2)_n$ Clusters and Films on Gold Surfaces. <i>Journal of the American Chemical Society</i> , 1997, 119, 4698-4711.	13.7	41
58	Self-Assembled Monolayers and Multilayers of Conjugated Thiols, $\alpha,\omega$ -Dithiols, and Thioacetyl-Containing Adsorbates. Understanding Attachments between Potential Molecular Wires and Gold Surfaces. <i>Journal of the American Chemical Society</i> , 1995, 117, 9529-9534.	13.7	710
59	Chain Length Dependence of the Structure and Wetting Properties in Binary Composition Monolayers of OH- and CH <sub>3</sub> -Terminated Alkanethiolates on Gold. <i>Langmuir</i> , 1995, 11, 3882-3893.	3.5	154
60	Water Atomized 17-4 PH Stainless Steel Powder as a Cheaper Alternative Powder Feedstock for Selective Laser Melting. <i>Materials Science Forum</i> , 0, 941, 698-703.	0.3	11