

# Sundar V Atre

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

2,765  
citations

236612

25  
h-index

174990

52  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2766  
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	6.6	710
2	Endothelial Cell Growth and Protein Adsorption on Terminally Functionalized, Self-Assembled Monolayers of Alkanethiolates on Gold. <i>Langmuir</i> , 1997, 13, 3404-3413.	1.6	275
3	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.	1.6	154
4	Effect of powders and binders on material properties and molding parameters in iron and stainless steel powder injection molding process. <i>Powder Technology</i> , 2009, 193, 162-169.	2.1	107
5	Synthesis and post-processing of nanomaterials using microreaction technology. <i>Journal of Nanoparticle Research</i> , 2008, 10, 965-980.	0.8	99
6	Effect of process parameters on the Selective Laser Melting (SLM) of tungsten. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 71, 315-319.	1.7	90
7	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.	2.6	82
8	Effects of atomizing media and post processing on mechanical properties of 17-4 PH stainless steel manufactured via selective laser melting. <i>Additive Manufacturing</i> , 2018, 22, 127-137.	1.7	74
9	Review: Thermal Debinding Process in Particulate Materials Processing. <i>Materials and Manufacturing Processes</i> , 2012, 27, 103-118.	2.7	71
10	Effects of particle characteristics on the microstructure and mechanical properties of 17-4 PH stainless steel fabricated by laser-powder bed fusion. <i>Powder Technology</i> , 2018, 331, 192-203.	2.1	67
11	Printability studies of Ti-6Al-4V by metal fused filament fabrication (MF3). <i>International Journal of Refractory Metals and Hard Materials</i> , 2020, 91, 105249.	1.7	63
12	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. <i>Jom</i> , 2016, 68, 860-868.	0.9	61
13	Nano-enabled microtechnology: polysulfone nanocomposites incorporating cellulose nanocrystals. <i>Cellulose</i> , 2007, 14, 577-584.	2.4	59
14	Microstructure-property relationships of 420 stainless steel fabricated by laser-powder bed fusion. <i>Powder Technology</i> , 2019, 343, 738-746.	2.1	54
15	The effects of material attributes on powder binder separation phenomena in powder injection molding. <i>Powder Technology</i> , 2013, 243, 79-84.	2.1	43
16	Feedstock properties and injection molding simulations of bimodal mixtures of nanoscale and microscale aluminum nitride. <i>Ceramics International</i> , 2013, 39, 6887-6897.	2.3	42
17	Rheological and thermal debinding properties of blended elemental Ti-6Al-4V powder injection molding feedstock. <i>Powder Technology</i> , 2017, 311, 357-363.	2.1	42
18	Synthesis of Crystalline, Nanometer-Scale, (CH <sub>2</sub> ) <sub>n</sub> Clusters and Films on Gold Surfaces. <i>Journal of the American Chemical Society</i> , 1997, 119, 4698-4711.	6.6	41

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19	Master debinding curves for solvent extraction of binders in powder injection molding. Powder Technology, 2012, 228, 14-17.	2.1	36
20	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.	1.7	36
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.	2.5	35
22	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.	1.0	34
23	Predicting Powder-Polymer Mixture Properties for PIM Design. Critical Reviews in Solid State and Materials Sciences, 2014, 39, 197-214.	6.8	33
24	Factors affecting properties of Ti-6Al-4V alloy additive manufactured by metal fused filament fabrication. Powder Technology, 2021, 386, 9-19.	2.1	33
25	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.	1.7	29
26	Review of Net Shape Fabrication of Thermally Conducting Ceramics. Materials and Manufacturing Processes, 2011, 26, 832-845.	2.7	27
27	Effect of binder composition on rheological behavior of PMN-PZT ceramic feedstock. Powder Technology, 2018, 330, 19-26.	2.1	23
28	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.	1.7	22
29	Effects of lubricant on green strength, compressibility and ejection of parts in die compaction process. Powder Technology, 2013, 233, 22-29.	2.1	22
30	The effects of nanoparticle addition on the sintering and properties of bimodal AlN. Ceramics International, 2012, 38, 6495-6499.	2.3	21
31	Microstructures, properties, and applications of laser sintered 17-4PH stainless steel. Journal of the American Ceramic Society, 2019, 102, 5679-5690.	1.9	18
32	The effects of nanoparticle addition on the densification and properties of SiC. Ceramics International, 2012, 38, 5393-5399.	2.3	17
33	Fabrication of micro-sized piezoelectric structure using powder injection molding with separated mold system. Ceramics International, 2018, 44, 12709-12716.	2.3	17
34	Exploring Convergence of Snake-Skin-Inspired Texture Designs and Additive Manufacturing for Mechanical Traction. Procedia Manufacturing, 2019, 34, 640-646.	1.9	17
35	Development of master sintering curve for field-assisted sintering of HfB <sub>2</sub> -20SiC. Ceramics International, 2012, 38, 4369-4372.	2.3	16
36	Green micromachining of ceramics using tungsten carbide micro-endmills. Journal of Materials Processing Technology, 2019, 267, 268-279.	3.1	16

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37	Powder injection molding process design for UAV engine components using nanoscale silicon nitride powders. <i>Ceramics International</i> , 2014, 40, 893-900.	2.3	14
38	The effects of nanoparticle addition on binder removal from injection molded aluminum nitride. <i>International Journal of Refractory Metals and Hard Materials</i> , 2013, 36, 77-84.	1.7	13
39	Finite Element-Based Simulation of Metal Fused Filament Fabrication Process: Distortion Prediction and Experimental Verification. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 5135-5149.	1.2	13
40	Bending behavior of 3D printed mechanically robust tubular lattice metamaterials. <i>Additive Manufacturing</i> , 2022, 50, 102565.	1.7	13
41	Synthesis of Nanoparticles in High Temperature Ceramic Microreactors: Design, Fabrication and Testing. <i>International Journal of Applied Ceramic Technology</i> , 2009, 6, 410-419.	1.1	12
42	Imbalance filling of multi-cavity tooling during powder injection molding. <i>Powder Technology</i> , 2014, 257, 124-131.	2.1	12
43	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
44	Structure and thermal stability of cellulose nanocrystal/polysulfone nanocomposites. <i>Materials Today Communications</i> , 2020, 22, 100797.	0.9	11
45	Simulations and injection molding experiments for aluminum nitride feedstock. <i>Ceramics International</i> , 2016, 42, 194-203.	2.3	10
46	Experimentation and analysis of powder injection molded Ti10Nb10Zr alloy: a promising candidate for electrochemical and biomedical application. <i>Journal of Materials Research and Technology</i> , 2019, 8, 5233-5245.	2.6	10
47	Process Sensitivity and Significant Parameters Investigation in Metal Fused Filament Fabrication of Ti-6Al-4V. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 5118-5134.	1.2	10
48	Powder injection molding of a mullite/zirconia composite. <i>Journal of Materials Research and Technology</i> , 2013, 2, 263-268.	2.6	9
49	The effects of nanoparticle addition on binder removal from injection molded silicon carbide. <i>Ceramics International</i> , 2014, 40, 13861-13868.	2.3	8
50	Powder injection molding of silicon carbide: processing issues. <i>Metal Powder Report</i> , 2016, 71, 460-464.	0.3	7
51	Influence of feedstock properties on the injection molding of aluminum nitride. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 90, 2813-2826.	1.5	7
52	Studies on the thermal stability and degradation kinetics of Pd/PC nanocomposites. <i>Journal of Applied Polymer Science</i> , 2010, 118, 3602-3611.	1.3	6
53	Robust, Functionalizable, Nanometer-Thick Poly(acrylic acid) Films Spontaneously Assembled on Oxidized Aluminum Substrates: Structures and Chemical Properties. <i>Langmuir</i> , 2011, 27, 3638-3653.	1.6	6
54	Sintering Characteristics of a Powder Injection Molded Ceria-Stabilized Zirconia/Mullite Composite. <i>Materials and Manufacturing Processes</i> , 2015, 30, 616-623.	2.7	3

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55	Metal matrix composites for fabricating tooling. International Journal of Refractory Metals and Hard Materials, 2020, 87, 105169.	1.7	2
56	Laser Powder Bed Fusion. , 2020, , 209-219.		2
57	Metallic nanostructures in a polymer matrix and substrate fabrication and structural characterization. Applied Physics A: Materials Science and Processing, 2011, 103, 1117-1123.	1.1	0
58	Microstructural Development of Green Micro-Machined, Injection-Molded Silicon Carbide. Microscopy and Microanalysis, 2016, 22, 1818-1819.	0.2	0
59	Effects of lubricant and part geometry on the ejection characteristics during die compaction. Powder Metallurgy, 2017, 60, 337-344.	0.9	0
60	Kinetics of thermal dewaxing of injectionâ€molded silicon carbide. International Journal of Ceramic Engineering & Science, 2019, 1, 85-91.	0.5	0