

# Siddhartha Roy

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

31  
papers

448  
citations

12  
h-index

20  
g-index

33  
ext. papers

527  
ext. citations

4.5  
avg, IF

3.75  
L-index

#	Paper	IF	Citations
31	Review on study of internal load transfer in metal matrix composites using diffraction techniques. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 840, 142973	5.2	0
30	Study of the elastic properties of porous copper fabricated via the lost carbonate sintering process. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 836, 142713	5.2	0
29	Developing a hybrid AlSiC-graphite functionally graded composite material for optimum composition and mechanical properties. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 805, 140625	5.2	8
28	A Critical Assessment of the Processing Parameters Yielding an Optimum Combination of Mechanical Properties in Cast Al-B4C Composites. <i>Transactions of the Indian Institute of Metals</i> , <b>2021</b> , 74, 1279-1294	1.2	2
27	Review on development of metal/ceramic interpenetrating phase composites and critical analysis of their properties. <i>Ceramics International</i> , <b>2021</b> , 48, 1451-1451	5	4
26	Processing and characterization of Al-Si alloy/SiC foam interpenetrating phase composite. <i>Materials Today: Proceedings</i> , <b>2021</b> , 44, 2930-2933	1.4	2
25	Effect of ceramic preform freeze-casting temperature and melt infiltration technique on the mechanical properties of a lamellar metal/ceramic composite. <i>Journal of Composite Materials</i> , <b>2020</b> , 54, 2001-2011	2.7	2
24	Anisotropic thermal expansion behavior of an interpenetrating metal/ceramic composite. <i>Thermochimica Acta</i> , <b>2020</b> , 684, 178488	2.9	11
23	Internal load transfer in an interpenetrating metal/ceramic composite material studied using energy dispersive synchrotron X-ray diffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 753, 247-252	5.2	12
22	Processing and characterization of elastic and thermal expansion behaviour of interpenetrating Al <sub>12</sub> Si/alumina composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 743, 339-348	5.2	16
21	Damage evolution in freeze cast metal/ceramic composites exhibiting lamellar microstructures. <i>Frattura Ed Integrita Strutturale</i> , <b>2015</b> , 9, 134-142	0.9	5
20	Effect of Phase architecture on mechanical properties of interpenetrating metal/ceramic composites <b>2014</b> , 77-86		
19	Numerical study of internal load transfer in metal/ceramic composites based on freeze-cast ceramic preforms and experimental validation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 585, 10-16	5.2	22
18	Load Partitioning Study in a 3D Interpenetrating AlSi <sub>12</sub> /Al <sub>2</sub> O <sub>3</sub> Metal/Ceramic Composite. <i>Materials Science Forum</i> , <b>2013</b> , 772, 103-107	0.4	2
17	Characterization of Elastic Properties in Porous Silicon Carbide Preforms Fabricated Using Polymer Waxes as Pore Formers. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 2269-2275	3.8	8
16	Mechanical properties of innovative metal/ceramic composites based on freeze-cast ceramic preforms <b>2012</b> , 213-220		
15	Processing and Elastic Property Characterization of Porous SiC Preform for Interpenetrating Metal/Ceramic Composites. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 3078-3083	3.8	21

14	Internal load transfer and damage evolution in a 3D interpenetrating metal/ceramic composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 551, 272-279	5.2	20
13	Complete determination of elastic moduli of interpenetrating metal/ceramic composites using ultrasonic techniques and micromechanical modelling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 8226-8235	5.2	42
12	Mechanical properties of cellular solids produced from hollow stainless steel spheres. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 5519-5526	4.2	8
11	Inelastic behavior of the single domain of metal-ceramic composites with lamellar microstructure. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2011</b> , 11, 285-286	0.2	4
10	Analysis of the elastic properties of an interpenetrating AlSi12Al <sub>2</sub> O <sub>3</sub> composite using ultrasound phase spectroscopy. <i>Composites Science and Technology</i> , <b>2011</b> , 71, 962-968	8.5	19
9	Internal load transfer in a metal matrix composite with a three-dimensional interpenetrating structure. <i>Acta Materialia</i> , <b>2011</b> , 59, 1424-1435	8.3	51
8	Damage evolution and domain-level anisotropy in metal/ceramic composites exhibiting lamellar microstructures. <i>Acta Materialia</i> , <b>2010</b> , 58, 2300-2312	8.3	57
7	Material Parameter Identification of Interpenetrating Metal-Ceramic Composites. <i>Key Engineering Materials</i> , <b>2009</b> , 417-418, 53-56	0.4	1
6	In situ Study of Internal Load Transfer in a Novel Metal/Ceramic Composite Exhibiting Lamellar Microstructure Using Energy Dispersive Synchrotron X-ray Diffraction. <i>Advanced Engineering Materials</i> , <b>2009</b> , 11, 471-477	3.4	31
5	Elastic constants of metal/ceramic composites with lamellar microstructures: Finite element modelling and ultrasonic experiments. <i>Composites Science and Technology</i> , <b>2009</b> , 69, 620-626	8.5	39
4	Residual stresses in novel metal/ceramic composites exhibiting a lamellar microstructure. <i>Powder Diffraction</i> , <b>2009</b> , 24, S59-S64	1.6	4
3	Metal/ceramic composites from freeze-cast ceramic preforms: Domain structure and elastic properties. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 1136-1143	8.5	53
2	Review on developments of bulk functionally graded composite materials. <i>International Materials Reviews</i> , 1-67	15.9	0
1	Effect of Phase Architecture on the Thermal Expansion Behavior of Interpenetrating Metal/Ceramic Composites. <i>Ceramic Transactions</i> , 33-43	0.1	4