Pratik K Ray

List of Publications by Year
in descending order

		758635	676716
25	514	12	22
papers	citations	h-index	g-index

26	26	26	435
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Applications of an extended Miedema's model for ternary alloys. Journal of Alloys and Compounds, 2010, 489, 357-361.	2.8	72
2	Lattice distortion as an estimator of solid solution strengthening in high-entropy alloys. Materials Characterization, 2021, 172, 110877.	1.9	69
3	Design of high-strength refractory complex solid-solution alloys. Npj Computational Materials, 2018, 4, .	3.5	56
4	Oxidation mechanism of W substituted Mo-Si-B alloys. Intermetallics, 2017, 87, 38-44.	1.8	38
5	Formation of multilayered scale during the oxidation of NiAlâ€“Mo alloy. Applied Surface Science, 2014, 301, 107-111.	3.1	32
6	Vacancy-mediated complex phase selection in high entropy alloys. Acta Materialia, 2020, 194, 540-546.	3.8	31
7	Oxidation resistance of a Mo-W-Si-B alloy at 1000â€“1300â€Â°C: The effect of a multicomponent Mo-Si-B coating. Applied Surface Science, 2019, 470, 289-295.	3.1	24
8	Learning phase selection and assemblages in High-Entropy Alloys through a stochastic ensemble-averaging model. Computational Materials Science, 2021, 197, 110647.	1.4	21
9	Highâ€Temperature Oxidation of ZrB₂â€“SiCâ€“AlN Composites at 1600Â°C. Journal of the American Ceramic Society, 2016, 99, 808-813.	1.9	18
10	Effect of Nb and W substitutions on the stability of the A15 Mo3Si phase. Journal of Alloys and Compounds, 2012, 537, 65-70.	2.8	16
11	A multi-stage hierarchical approach to alloy design. Jom, 2010, 62, 25-29.	0.9	14
12	Effect of AlN Substitutions on the Oxidation Behavior of ZrB₂â€“SiC Composites at 1600Â°C. Journal of the American Ceramic Society, 2016, 99, 3389-3397.	1.9	14
13	Distilling physical origins of hardness in multi-principal element alloys directly from ensemble neural network models. Npj Computational Materials, 2022, 8, .	3.5	14
14	Effects of Hydrothermal Aging on Mechanical Behavior of Sub-zero Weathered GFRP Composites. Journal of Reinforced Plastics and Composites, 2006, 25, 673-680.	1.6	13
15	A study on spot heating induced fatigue crack growth retardation. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 579-585.	1.7	12
16	Designing oxidation resistant ultra-high temperature ceramics through the development of an adherent native thermal barrier. Journal of Alloys and Compounds, 2019, 790, 1119-1126.	2.8	10
17	Effects of Thermal Shocks and Thermal Spikes on Hygrothermal Behavior of Glassâ€”Polyester Composites. Journal of Reinforced Plastics and Composites, 2007, 26, 725-738.	1.6	9
18	A first-principles based description of the Hf-Ni system supported by high-temperature synchrotron experiments. Thermochimica Acta, 2018, 668, 142-151.	1.2	9

#	Article	IF	Citations
19	Influence of thermodynamics and local geometry on glass formation in Zr based alloys. Applied Physics Letters, 2008, 93, 061903.	1.5	8
20	Effect of Hygrothermal Shock Cycles on Interlaminar Shear Strength of Hybrid Composites. Journal of Reinforced Plastics and Composites, 2007, 26, 519-524.	1.6	7
21	Prior Thermal Spikes and Thermal Shocks on Mechanical Behavior of Glass Fiber-Epoxy Composites. Journal of Reinforced Plastics and Composites, 2006, 25, 197-213.	1.6	6
22	Pressureless Sintering of Mo-Si-B Alloys with Fe Additive. Journal of Materials Engineering and Performance, 2017, 26, 2417-2422.	1.2	6
23	Examining oxidation in Î²-NiAl and Î²-NiAl+Hf alloys by stochastic cellular automata simulations. Npj Materials Degradation, 2021, 5.	2.6	6
24	Diffusion of multi-principal elements through stable Cr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math> and Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:msub><mml:mrow /><mml:	1.3	6
25	Revisiting glass formation in Zr-Cu-Al alloys. Materials Today: Proceedings, 2022, 62, 7421-7427.	0.9	2