

# P R Subramanian

## List of Publications by Year in descending order

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51  
papers

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citations

236612

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53  
all docs

53  
docs citations

53  
times ranked

1853  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of very-high-temperature Nb-silicide-based composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2043-2052.	1.1	607
2	Ultrahigh-Temperature Nb-Silicide-Based Composites. MRS Bulletin, 2003, 28, 646-653.	1.7	277
3	Cu-Pd (Copper-Palladium). Journal of Phase Equilibria and Diffusion, 1991, 12, 231-243.	0.3	197
4	The ag-cu (silver-copper) system. Journal of Phase Equilibria and Diffusion, 1993, 14, 62-75.	0.3	195
5	The Science, Technology, and Implementation of TiAl Alloys in Commercial Aircraft Engines. Materials Research Society Symposia Proceedings, 2013, 1516, 49-58.	0.1	191
6	Advanced intermetallic alloys“beyond gamma titanium aluminides. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 239-240, 1-13.	2.6	186
7	The development of Nb-based advanced intermetallic alloys for structural applications. Jom, 1996, 48, 33-38.	0.9	178
8	High temperature phase equilibria of the L12 composition in the Al <sub>3</sub> Ti <sub>2</sub> -Ni, Al <sub>3</sub> Ti <sub>2</sub> -Fe, and Al <sub>3</sub> Ti <sub>2</sub> -Cu systems. Scripta Metallurgica, 1989, 23, 327-331.	1.2	126
9	Processing high-temperature refractory-metal silicide in-situ composites. Jom, 1999, 51, 32-36.	0.9	100
10	The Cu~In (Copper-Indium) system. Bulletin of Alloy Phase Diagrams, 1989, 10, 554-568.	0.3	80
11	The Cu-Ta (Copper-Tantalum) system. Bulletin of Alloy Phase Diagrams, 1989, 10, 652-655.	0.3	65
12	Compressive creep behavior of Nb <sub>5</sub> Si <sub>3</sub> . Scripta Metallurgica Et Materialia, 1995, 32, 1227-1232.	1.0	61
13	Effect of dopants on grain boundary decohesion of Ni: A first-principles study. Applied Physics Letters, 2008, 93, .	1.5	48
14	Phase equilibria in niobium rich Nb-Al-Ti alloys. Scripta Metallurgica Et Materialia, 1992, 27, 265-270.	1.0	45
15	Microstructures and mechanical behavior of NiAl-Mo and NiAl-Mo-Ti two-phase alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 2769-2781.	1.1	45
16	Phenomenological observations of lamellar orientation effects on the creep behavior of Ti~48at.%Al PST crystals. Acta Materialia, 2000, 48, 541-551.	3.8	45
17	Phase relationships in the Al-Ta system. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 539-545.	1.4	42
18	The As~Cu (Arsenic-Copper) system. Bulletin of Alloy Phase Diagrams, 1988, 9, 605-618.	0.3	41

#	ARTICLE	IF	CITATIONS
19	The Cu-Mo (Copper-Molybdenum) system. Bulletin of Alloy Phase Diagrams, 1990, 11, 169-172.	0.3	40
20	Strengthening mechanisms (via hardness analysis) in nanocrystalline NiCr with nanoscaled Y <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> dispersoids. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 416, 211-218.	2.6	39
21	The Cu-Hf (copper-hafnium) system. Bulletin of Alloy Phase Diagrams, 1988, 9, 51-56.	0.3	37
22	Effect of friction, backpressure and strain rate sensitivity on material flow during equal channel angular extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 406, 102-109.	2.6	37
23	Thermodynamics of formation of Y-Ni alloys. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1985, 16, 577-584.	0.5	31
24	Thermodynamics of formation of Y-Fe alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1984, 8, 295-305.	0.7	30
25	First-principles understanding of environmental embrittlement of the Ni/Ni <sub>3</sub> Al interface. Scripta Materialia, 2010, 63, 391-394.	2.6	27
26	Processing of continuously reinforced Ti-alloy metal matrix composites (MMC) by magnetron sputtering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 244, 1-10.	2.6	24
27	Thermodynamics of formation of Y-Co alloys. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1985, 16, 1195-1201.	1.4	23
28	The stability of Nb/Nb <sub>5</sub> Si <sub>3</sub> microlaminates at high temperatures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2363-2371.	1.1	19
29	Kirkendall porosity during thermal treatment of Mo/Cu nanomultilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 459, 145-150.	2.6	19
30	Thermally stable nanomultilayer films of Cu/Mo. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 995-1003.	1.1	17
31	Continuum predictions of deformation in composites with two creeping phases <sup>II</sup> . Nb <sub>5</sub> Si <sub>3</sub> Nb composites. Acta Materialia, 1997, 45, 3135-3142.	3.8	16
32	Kinetic modeling of high temperature oxidation of Ni-base alloys. Computational Materials Science, 2011, 50, 811-819.	1.4	16
33	First principles calculation of mixing enthalpy of $\hat{1}^2$ -Ti with transition elements. Journal of Alloys and Compounds, 2013, 550, 501-508.	2.8	14
34	Hydrogen vapor pressure measurements over a portion of the Lu-H system. Journal of the Less Common Metals, 1982, 87, 205-213.	0.9	13
35	Phase equilibria in the vicinity of the DO <sub>22</sub> Al <sub>3</sub> Nb composition in the Al-Nb-W, Al-Nb-Co, Al-Nb-Pt, and Al-Nb-Ag systems. Scripta Metallurgica Et Materialia, 1991, 25, 231-236.	1.0	10
36	Novel technique for evaluating grain boundary fracture strength in metallic materials. Scripta Materialia, 2011, 64, 1063-1066.	2.6	10

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37	Effect of nitrogen on the magnetic moment of $\hat{1}\pm$ -Fe and FeCo alloys from first-principle calculations. Journal of Applied Physics, 2007, 101, 033912.	1.1	9
38	Thermodynamic aspects of massive transformations in the Cu $\hat{1}$ -Ga and Cu $\hat{1}$ -Zn systems. Acta Metallurgica, 1988, 36, 937-943.	2.1	8
39	Evaluation of a Ni-20Cr Alloy Processed by Multi-Axis Forging. Materials Science Forum, 2006, 503-504, 793-798.	0.3	8
40	Energetics of interstitial oxygen in $\hat{1}^2$ -TiX (X=transition elements) alloys using first principles methods. Journal of Alloys and Compounds, 2013, 571, 107-113.	2.8	8
41	Ion-beam mixing and thermal annealing of Al $\hat{1}$ -Nb and Al $\hat{1}$ -Ta thin films. Journal of Materials Research, 1988, 3, 1082-1088.	1.2	7
42	Differential role of nanoscaled oxide dispersoids (Y <sub>2</sub> O <sub>3</sub> vs Al <sub>2</sub> O <sub>3</sub> ) in the high-temperature structural stability of NiCr alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3455-3468.	1.1	6
43	The ag-h (silver-hydrogen) system. Journal of Phase Equilibria and Diffusion, 1991, 12, 649.	0.3	5
44	Solid state reactions between selected intermetallics and oxides in the Al $\hat{1}$ -Y $\hat{1}$ -O system. Scripta Metallurgica Et Materialia, 1993, 28, 961-966.	1.0	4
45	Crystal structure determination of Al <sub>2</sub> Ta. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 71, 941-953.	0.6	4
46	Refractory metals and materials: Joining and applications. Jom, 1996, 48, 32-32.	0.9	3
47	Metastable phase evolution in Al <sub>2</sub> O <sub>3</sub> dispersed nanocrystalline NiCr alloys. Journal of Materials Research, 2007, 22, 68-75.	1.2	2
48	Characterizing Ultrafine Grained Material using EBSD. Microscopy and Microanalysis, 2009, 15, 420-421.	0.2	1
49	Nb-Silicide Phase Stabilization In Cast And Hip In-Situ Composites. Microscopy and Microanalysis, 2002, 8, 1454-1455.	0.2	0
50	Micromagnetic simulations of the dependence of domain wall width with grain size in systems with cubic and uniaxial anisotropy. , 2006, , .		0
51	Characterization of Fatigue Fracture in Ni-20Pct Cr Alloys Using White Light Interference Microscopy and Scanning Probe Microscopy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1073-1088.	1.1	0