

# P R Subramanian

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2611932/p-r-subramanian-publications-by-year.pdf>

**Version:** 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

51  
papers

2,533  
citations

24  
h-index

50  
g-index

53  
ext. papers

2,761  
ext. citations

3.5  
avg, IF

4.54  
L-index

| #  | Paper   | IF  | Citations |
|----|---|-----|-----------|
| 51 | First principles calculation of mixing enthalpy of $\epsilon$ Ti with transition elements. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 550, 501-508  | 5.7 | 8         |
| 50 | Energetics of interstitial oxygen in $\epsilon$ TiX (X = transition elements) alloys using first principles methods. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 571, 107-113  | 5.7 | 5         |
| 49 | The Science, Technology, and Implementation of TiAl Alloys in Commercial Aircraft Engines. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1516, 49-58   |     | 120       |
| 48 | Kinetic modeling of high temperature oxidation of Ni-base alloys. <i>Computational Materials Science</i> , <b>2011</b> , 50, 811-819  | 3.2 | 9         |
| 47 | Novel technique for evaluating grain boundary fracture strength in metallic materials. <i>Scripta Materialia</i> , <b>2011</b> , 64, 1063-1066  | 5.6 | 10        |
| 46 | Characterization of Fatigue Fracture in Ni-20 Pct Cr Alloys Using White Light Interference Microscopy and Scanning Probe Microscopy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 1073-1088   | 2.3 |           |
| 45 | First-principles understanding of environmental embrittlement of the Ni/Ni <sub>3</sub> Al interface. <i>Scripta Materialia</i> , <b>2010</b> , 63, 391-394   | 5.6 | 20        |
| 44 | Characterizing Ultrafine Grained Material using EBSD. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 420-421   | 0.5 | 1         |
| 43 | Effect of dopants on grain boundary decohesion of Ni: A first-principles study. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 223113   | 3.4 | 42        |
| 42 | Kirkendall porosity during thermal treatment of Mo/Ti nanomultilayers. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 459, 145-150   | 5.3 | 17        |
| 41 | Effect of nitrogen on the magnetic moment of $\epsilon$ Fe and FeCo alloys from first-principle calculations. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 033912   | 2.5 | 8         |
| 40 | Metastable phase evolution in Al <sub>2</sub> O <sub>3</sub> dispersed nanocrystalline NiCr alloys. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 68-75  | 2.5 | 1         |
| 39 | Thermally stable nanomultilayer films of Cu/Mo. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 995-1003   | 2.3 | 15        |
| 38 | 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. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 3455-3468      | 2.3 | 5         |
| 37 | Evaluation of a Ni-20Cr Alloy Processed by Multi-Axis Forging. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 793-798  | 0.4 | 8         |
| 36 | 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. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 416, 211-218 | 5.3 | 31        |
| 35 | Effect of friction, backpressure and strain rate sensitivity on material flow during equal channel angular extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 406, 102-109  | 5.3 | 35        |

|    |   |     |     |
|----|---|-----|-----|
| 34 | A review of very-high-temperature Nb-silicide-based composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2003</b> , 34, 2043-2052  | 2.3 | 510 |
| 33 | Ultrahigh-Temperature Nb-Silicide-Based Composites. <i>MRS Bulletin</i> , <b>2003</b> , 28, 646-653   | 3.2 | 241 |
| 32 | Nb-Silicide Phase Stabilization In Cast And Hip In-Situ Composites. <i>Microscopy and Microanalysis</i> , <b>2002</b> , 8, 1454-1455  | 0.5 |     |
| 31 | The stability of Nb/Nb <sub>5</sub> Si <sub>3</sub> microlaminates at high temperatures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2001</b> , 32, 2363-2371                           | 2.3 | 17  |
| 30 | Phenomenological observations of lamellar orientation effects on the creep behavior of Ti <sub>88</sub> at.%Al PST crystals. <i>Acta Materialia</i> , <b>2000</b> , 48, 541-551   | 8.4 | 39  |
| 29 | Processing high-temperature refractory-metal silicide in-situ composites. <i>Jom</i> , <b>1999</b> , 51, 32-36  | 2.1 | 90  |
| 28 | Processing of continuously reinforced Ti-alloy metal matrix composites (MMC) by magnetron sputtering. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1998</b> , 244, 1-10 | 5.3 | 22  |
| 27 | Continuum predictions of deformation in composites with two creeping phases. Nb <sub>5</sub> Si <sub>3</sub> Nb composites. <i>Acta Materialia</i> , <b>1997</b> , 45, 3135-3142  | 8.4 | 14  |
| 26 | Advanced intermetallic alloys Beyond gamma titanium aluminides. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 239-240, 1-13                                   | 5.3 | 166 |
| 25 | Refractory metals and materials: Joining and applications. <i>Jom</i> , <b>1996</b> , 48, 32-32   | 2.1 | 3   |
| 24 | The development of Nb-based advanced intermetallic alloys for structural applications. <i>Jom</i> , <b>1996</b> , 48, 33-38   | 2.1 | 162 |
| 23 | Crystal structure determination of Al <sub>2</sub> Ta. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , <b>1995</b> , 71, 941-953                       |     | 2   |
| 22 | Compressive creep behavior of Nb <sub>5</sub> Si <sub>3</sub> . <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 32, 1227-1232   |     | 60  |
| 21 | Microstructures and mechanical behavior of NiAl-Mo and NiAl-Mo-Ti two-phase alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1994</b> , 25, 2769-2781                                | 2.3 | 38  |
| 20 | Solid state reactions between selected intermetallics and oxides in the Al-Y <sub>2</sub> O system. <i>Scripta Metallurgica Et Materialia</i> , <b>1993</b> , 28, 961-966   |     | 3   |
| 19 | The ag-cu (silver-copper) system. <i>Journal of Phase Equilibria and Diffusion</i> , <b>1993</b> , 14, 62-75  |     | 151 |
| 18 | Phase equilibria in niobium rich Nb-Al-Ti alloys. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 265-270   |     | 40  |
| 17 | The ag-h (silver-hydrogen) system. <i>Journal of Phase Equilibria and Diffusion</i> , <b>1991</b> , 12, 649   |     | 5   |

|    |   |        |
|----|---|--------|
| 16 | Cu-Pd (Copper-Palladium). <i>Journal of Phase Equilibria and Diffusion</i> , <b>1991</b> , 12, 231-243  | 164    |
| 15 | 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. <i>Scripta Metallurgica Et Materialia</i> , <b>1991</b> , 25, 231-236                                     | 8      |
| 14 | The Cu-Mo (Copper-Molybdenum) system. <i>Bulletin of Alloy Phase Diagrams</i> , <b>1990</b> , 11, 169-172   | 33     |
| 13 | Phase relationships in the Al-Ta system. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1990</b> , 21, 539-545  | 33     |
| 12 | The Cu <sub>11</sub> In (Copper-Indium) system. <i>Bulletin of Alloy Phase Diagrams</i> , <b>1989</b> , 10, 554-568   | 69     |
| 11 | The Cu-Ta (Copper-Tantalum) system. <i>Bulletin of Alloy Phase Diagrams</i> , <b>1989</b> , 10, 652-655   | 49     |
| 10 | High temperature phase equilibria of the L1 <sub>2</sub> 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. <i>Scripta Metallurgica</i> , <b>1989</b> , 23, 327-331 | 118    |
| 9  | Thermodynamic aspects of massive transformations in the Cu <sub>3</sub> Ga and Cu <sub>3</sub> Zn systems. <i>Acta Metallurgica</i> , <b>1988</b> , 36, 937-943   | 7      |
| 8  | The Cu-Hf (copper-hafnium) system. <i>Bulletin of Alloy Phase Diagrams</i> , <b>1988</b> , 9, 51-56   | 25     |
| 7  | The As <sub>2</sub> Cu (Arsenic-Copper) system. <i>Bulletin of Alloy Phase Diagrams</i> , <b>1988</b> , 9, 605-618  | 35     |
| 6  | Ion-beam mixing and thermal annealing of Al <sub>100</sub> Nb and Al <sub>100</sub> Ta thin films. <i>Journal of Materials Research</i> , <b>1988</b> , 3, 1082-1088  | 2.5 5  |
| 5  | Thermodynamics of formation of Y-Ni alloys. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , <b>1985</b> , 16, 577-584   | 28     |
| 4  | Thermodynamics of formation of Y-Co alloys. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1985</b> , 16, 1195-1201   | 23     |
| 3  | Thermodynamics of formation of Y-Fe alloys. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>1984</b> , 8, 295-305  | 1.9 26 |
| 2  | Hydrogen vapor pressure measurements over a portion of the Lu-H system. <i>Journal of the Less Common Metals</i> , <b>1982</b> , 87, 205-213  | 11     |
| 1  | Interfaces in Ni-Based Superalloys and Implications for Mechanical Behavior and Environmental Embrittlement: A First-Principles Study 531-536   | 1      |