

# Ravi S Kottada

## List of Publications by Year in descending order

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236833

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Nano- and micro-mechanical properties and corrosion performance of a HVOF sprayed AlCoCrFeNi high-entropy alloy coating. <i>Journal of Alloys and Compounds</i> , 2022, 912, 165000.	2.8	19
2	Unusual substructure evolution and post-dynamic recrystallization effects on flow softening mechanism in a $\text{Mg}_{13}\text{Ca}_3\text{Sn}$ free Co-base superalloy. <i>Materialia</i> , 2022, 24, 101467.	1.3	2
3	Composite of medium entropy alloys synthesized using spark plasma sintering. <i>Scripta Materialia</i> , 2021, 191, 46-51.	2.6	16
4	Synergetic influence of microconstituents on the damage accumulation and consequent effect on the flow behaviour in cast Mg-Ca-Sn alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 799, 140167.	2.6	3
5	Multiscale mechanical performance and corrosion behaviour of plasma sprayed AlCoCrFeNi high-entropy alloy coatings. <i>Journal of Alloys and Compounds</i> , 2021, 854, 157140.	2.8	107
6	Evaluating the influence of microstructural attributes: Fraction, composition, size and spatial distribution of phases on the oxidation behaviour of high-entropy alloys. <i>Corrosion Science</i> , 2021, 184, 109381.	3.0	27
7	Strengthening mechanisms in CrMoNbTiW refractory high entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 819, 141503.	2.6	34
8	Hot corrosion-creep interaction in IN718 under simulated marine environment: Introducing strain-associated-time (SAT) plots for comprehensive understanding. <i>Corrosion Science</i> , 2021, 190, 109667.	3.0	11
9	Investigations into sample geometry effects on the superelastic and fatigue behavior of Nitinol: Modeling and experiments. <i>Materialia</i> , 2021, 20, 101256.	1.3	3
10	Understanding the microstructural evolution of high entropy alloy coatings manufactured by atmospheric plasma spray processing. <i>Applied Surface Science</i> , 2020, 505, 144117.	3.1	91
11	Theoretical and experimental studies on thermal stability of nanocrystalline Mg-Mo alloy. <i>Materialia</i> , 2020, 14, 100933.	1.3	3
12	Influence of processing route on the alloying behavior, microstructural evolution and thermal stability of CrMoNbTiW refractory high-entropy alloy. <i>Journal of Materials Research</i> , 2020, 35, 1556-1571.	1.2	13
13	Distinct role of eutectic morphology on the plastic flow in cast Mg-3Ca alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 791, 139633.	2.6	3
14	Effect of long-term exposure at 650°C on microstructural and creep characteristics of T92/Super304H dissimilar welds. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2020, 64, 467-481.	1.3	2
15	Thermal Spray High-Entropy Alloy Coatings: A Review. <i>Journal of Thermal Spray Technology</i> , 2020, 29, 857-893.	1.6	162
16	Understanding the Hot Working Behavior of a Ni-Base Superalloy XH 67 via Processing Map Approach. <i>Materials Performance and Characterization</i> , 2020, 9, 224-236.	0.2	2
17	Exploring the Safe Hot Working Regime of Creep-Resistant Mg-3Ca-2Sn-1Al Alloy. <i>Materials Performance and Characterization</i> , 2020, 9, 215-223.	0.2	0
18	Phase evolution of refractory high-entropy alloy CrMoNbTiW during mechanical alloying and spark plasma sintering. <i>Journal of Materials Research</i> , 2019, 34, 756-766.	1.2	25

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19	Influence of Two Different Salt Mixture Combinations of Na <sub>2</sub> SO <sub>4</sub> -NaCl-NaVO <sub>3</sub> on Hot Corrosion Behavior of Ni-Base Superalloy Nimonic263 at 800Å°C. Journal of Materials Engineering and Performance, 2019, 28, 1077-1093.	1.2	17
20	An investigation on diffusivity while achieving a cylindrical aluminide coating on metals using simultaneous spark plasma sintering of powders. Scripta Materialia, 2019, 170, 156-160.	2.6	5
21	Grain growth kinetics in CoCrFeNi and CoCrFeMnNi high entropy alloys processed by spark plasma sintering. Journal of Alloys and Compounds, 2019, 791, 1114-1121.	2.8	57
22	First report on cold-sprayed AlCoCrFeNi high-entropy alloy and its isothermal oxidation. Journal of Materials Research, 2019, 34, 796-806.	1.2	67
23	On the role of Al and Zn addition on eutectic morphology in Mg-3Ca-2Sn cast alloy. Scripta Materialia, 2019, 162, 432-436.	2.6	5
24	Achieving exceptional creep resistance in rare-earth-free Mg-base alloys by engineering the shape, size and fraction of eutectic, particles and precipitates. Scripta Materialia, 2019, 162, 121-126.	2.6	15
25	Estimation of diffusivity from densification data obtained during spark plasma sintering. Scripta Materialia, 2019, 161, 36-39.	2.6	17
26	An investigation of oxidation/hot corrosion-creep interaction at 800 Å°C in a Ni-base superalloy coated with salt mixture deposits of Na <sub>2</sub> SO <sub>4</sub> -NaCl-NaVO <sub>3</sub> . Corrosion Science, 2019, 147, 283-298.	3.0	15
27	Pressure controlled micro-viscous deformation assisted spark plasma sintering of Fe-based bulk amorphous alloy. Journal of Alloys and Compounds, 2018, 738, 10-15.	2.8	18
28	Phase evolution and thermal stability of AlCoCrFe high entropy alloy with carbon as unsolicited addition from milling media. Materials Chemistry and Physics, 2018, 210, 57-61.	2.0	41
29	Verification of correlation between densification during spark plasma sintering and compressive creep of ultrafine-grained in-situ Al <sub>2</sub> O <sub>3</sub> -reinforced B2 aluminide matrix composites. Journal of Alloys and Compounds, 2018, 735, 1921-1930.	2.8	8
30	A simple and versatile machine for creep testing at low loads (6â€“300 N) and on miniaturized specimens: Application to a Mg-base alloy. Review of Scientific Instruments, 2018, 89, 105102.	0.6	4
31	Hot deformation behaviour of Mg-3Al-3Sn and Mg-3Al-3Sn-1â€“Zn Alloys: Role of Zn. Materialia, 2018, 3, 274-287.	1.3	12
32	Friction Battering: A New Technique for Dissimilar Welding. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1416-1422.	1.0	6
33	Heat-Affected Zone Liquation Cracking Resistance of Friction Stir Processed Aluminum-Copper Alloy AA 2219. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1158-1173.	1.0	8
34	Friction stir selective alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 186-190.	2.6	19
35	Use of Friction Stir Processing for Improving Heat-Affected Zone Liquation Cracking Resistance of a Cast Magnesium Alloy AZ91D. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 3270-3280.	1.0	8
36	Thermal stability and grain boundary strengthening in ultrafine-grained CoCrFeNi high entropy alloy composite. Materials and Design, 2017, 134, 426-433.	3.3	195

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37	Use of Friction Buttering for Overcoming HAZ Liquation Cracking. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2274-2280.	1.0	3
38	High Strength and Good Ductility in Cu-3Ag-0.5Zr Alloy by Cryo-Rolling and Aging. Journal of Materials Engineering and Performance, 2017, 26, 350-357.	1.2	10
39	Additive manufacturing of an aluminum matrix composite reinforced with nanocrystalline high-entropy alloy particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 193-203.	2.6	131
40	An innovative spraying setup to obtain uniform salt(s) mixture deposition to investigate hot corrosion. Review of Scientific Instruments, 2016, 87, 025107.	0.6	5
41	Hot deformation behaviour and processing map of Co-Cu-Fe-Ni-Ti eutectic high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 227-235.	2.6	93
42	Evolution of morphology and texture during high energy ball milling of Ni and Ni-5 wt%Cu powders. Materials Characterization, 2016, 120, 90-96.	1.9	10
43	Formation of amorphous alumina during sintering of nanocrystalline B2 aluminides. Materials Characterization, 2016, 119, 186-194.	1.9	7
44	Hot corrosion studies on Ni-base superalloy at 650Å°C under marine-like environment conditions using three salt mixture (Na <sub>2</sub> SO <sub>4</sub> +NaCl+NaVO <sub>3</sub> ). Corrosion Science, 2016, 105, 109-119.	3.0	75
45	Exceptional resistance to grain growth in nanocrystalline CoCrFeNi high entropy alloy at high homologous temperatures. Journal of Alloys and Compounds, 2016, 662, 361-367.	2.8	159
46	Friction deposition of titanium particle reinforced aluminum matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 653, 71-83.	2.6	59
47	Plasma-Sprayed High Entropy Alloys: Microstructure and Properties of AlCoCrFeNi and MnCoCrFeNi. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 791-800.	1.1	149
48	On correlation between densification kinetics during spark plasma sintering and compressive creep of B2 aluminides. Scripta Materialia, 2015, 107, 63-66.	2.6	15
49	Effect of Molybdenum and Niobium on the Phase Formation and Hardness of Nanocrystalline CoCrFeNi High Entropy Alloys. Journal of Nanoscience and Nanotechnology, 2014, 14, 8106-8109.	0.9	35
50	Alloying, thermal stability and strengthening in spark plasma sintered Al <sub>x</sub> CoCrCuFeNi high entropy alloys. Journal of Alloys and Compounds, 2014, 583, 419-426.	2.8	220
51	On Joule heating during spark plasma sintering of metal powders. Scripta Materialia, 2014, 93, 52-55.	2.6	61
52	Characterization of Oxide Dispersed AlCoCrFe High Entropy Alloy Synthesized by Mechanical Alloying and Spark Plasma Sintering. Transactions of the Indian Institute of Metals, 2013, 66, 369-373.	0.7	58
53	Synthesis and Characterization of Spark Plasma Sintered FeAl and In situ FeAl-Å“Al <sub>2</sub> O <sub>3</sub> Composite. Transactions of the Indian Institute of Metals, 2013, 66, 419-424.	0.7	3
54	Microstructure and Mechanical Properties of Cu-Ag-Zr Alloy. Journal of Materials Engineering and Performance, 2013, 22, 3884-3889.	1.2	29

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55	Phase Evolution and Densification Behavior of Nanocrystalline Multicomponent High Entropy Alloys During Spark Plasma Sintering. <i>Jom</i> , 2013, 65, 1797-1804.	0.9	93
56	Phase formation in mechanically alloyed $\text{Al}_x\text{CoCrCuFeNi}$ ( $x=0.45, 1, 2.5, 5$ mol) high entropy alloys. <i>Intermetallics</i> , 2013, 32, 119-126.	1.8	131
57	Alloying behavior in multi-component $\text{AlCoCrCuFe}$ and $\text{NiCoCrCuFe}$ high entropy alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 534, 83-89.	2.6	326
58	High temperature deformation processing maps for boron modified $\text{Ti-6Al-4V}$ alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 6157-6165.	2.6	49
59	Grain Boundary Sliding during Diffusion and Dislocation Creep in a Mg-0.7% Al Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 1743-1749.	1.1	18
60	Low temperature compressive creep in electrodeposited nanocrystalline nickel. <i>Scripta Materialia</i> , 2005, 53, 887-892.	2.6	65
61	High Temperature Deformation Behaviour of a Mg-0.8Al Alloy. <i>Materials Science Forum</i> , 2004, 447-448, 227-232.	0.3	1
62	Hot Working of an as-Cast Mg-2%Al Alloy. <i>Materials Science Forum</i> , 2003, 426-432, 4417-4422.	0.3	2
63	Is there Diffusion Creep in Alumina?. <i>Key Engineering Materials</i> , 2000, 171-174, 779-786.	0.4	2
64	The high temperature tensile and compressive deformation characteristics of magnesia doped alumina. <i>Acta Materialia</i> , 2000, 48, 3905-3915.	3.8	38
65	An experimental technique for fabricating tensile ceramic specimens. <i>Scripta Materialia</i> , 1999, 41, 1091-1095.	2.6	1
66	Age-Hardening Characteristics of Cu-3Ag-0.5Zr Alloy. <i>Materials Science Forum</i> , 0, 710, 563-568.	0.3	7
67	An Investigation on Diffusivity While Achieving a Cylindrical Aluminide Coating on Metals Using Simultaneous Spark Plasma Sintering of Powders. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
68	On the Solid Solution Strengthening in Crmonbtiw Refractory High Entropy Alloy. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
69	Composite of Medium Entropy Alloys Synthesized Using Spark Plasma Sintering. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0