Dr Nitin Pandurang Wasekar

Academic and Professional Information

PhD *(Metallurgical and Materials Engineering), 2013, IIT Madras, Chennai*
M. Engg. *(Metallurgy), 2001-2003, Indian Institute of Science, Bangalore*
B. Engg. *(Metallurgy), 1997-2001, National Institute of Technology, Nagpur*

Scientist*, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) Hyderabad, 2003-present (**Scientist 'F'**)*

Electrometallurgy, Extraction, Tribology, Corrosion, Surface Science

Editorial Board

Scientific Reports (Nature Portfolio)

Transactions of Indian Institute of Metals (Springer Nature)

Supervision of PhD, Masters/Bachelor/Diploma thesis

No. of PhD guided: 1 (IIT Bombay), 1 (UoH Hyderabad-Ongoing)
No. of SRF, JRF guided: 5
No. of M Tech thesis guided: 4
No. of B Tech thesis /graduate trainees guided: 21, Diploma: 02. ***Total:*** *33*

PhD Supervision

B. Lavakumer: IIT Bombay, 24-02-2024: Synthesis, Microstructure and Wear Performance of Gradient Ni-W Coatings by Electrodeposition

C. Bhavani: UoH Hyderabad: Ongoing since Jan 2025: Development and performance of HEA coatings

Publications: 51 Scopus (Listed Separately), Q1-40, Q2-9

Avg Journal Impact Factor: 4.92

h-Index*: 24 (Scopus), 27 (Google Scholar: Feb 2026)* ***i10-Index****: 38*

Google Scholar: Nitin P. Wasekar - Google Scholar

Knowledge Dissemination/Teaching/Resource/Academia Interaction

1. ***Resource person*** *to deliver a talk on 'corrosion and tribocorrosion in medium entropy alloy deposited through electrochemical route' Five-Day* ***Faculty Development Programme*** *(FDP) titled "INTEGRATED CORROSION ASSESSMENT OF MATERIALS AND WELDED JOINTS: CHARACTERIZATION AND MODELLING APPROACHES" from 09/03/2026 to 13/03/2026 Department of Mechanical Engineering, Methodist College of Engineering and Technology, Affiliated to Osmania University, Abids, Hyderabad.*
2. *'Pulsed electrodeposited Ni-W for hard chrome replacement' at* ***All India Training Programme****-Industrial Metal Finishing and Allied Technologies for Aerospace and Automotive Industries (AITP-2025), 9-11*

January 2025, Materials Engineering Department, IISc Bangalore, organized by Electrochemical Society of India.

3. ***Industrial Seminar** on 'Compositionally modulated Ni-W multilayers to alleviate the residual stresses in coatings for superior wear resistance' as a part of **M.Tech curriculum, at NIT Nagpur.***
4. *'Tribological properties of electrodeposited coatings, composites and multilayers' at Surface Engineering and Tribological Challenges in Sustainable Manufacturing, SERB sponsored Workshop (**Karyashala**) 18-24 Dec 2023, Birla Institute of Technology Mesra, Ranchi.*
5. ***Resource Person** on 'Compositionally modulated Ni-W multilayers to alleviate the residual stresss in coatings for superior wear resistance' at **Refresher course** on Materials Science organized by UGC HRDC, Osmania University 01-16 Sept 2023 Hyderabad.*
6. *'Pulsed electrodeposition of nanostructured coatings: from synthesis to applications in automotive industry' in **AICTE-QIP STC** (Quality Improvement Programme, Short Term Course for Faculty) on Materials Engineering from synthesis to applications hosted by IIT Indore from 21-26 Feb 2022.*

Patents: Granted: 12, Filed: 2

S. No.	***DETAILS OF PATENT GRANTED/Filed***
1.	***US Patent # 11732375 B2** (Granted on 22/08/2023): Iron tungsten coating formulations and processes.*
2.	***US Patent # 11208731 B2** (Granted on 28/12/2021): Iron tungsten coating formulations and processes.*
3.	***Indian Patent # 285178** (Granted on 14/07/2017): An improved method for preparing nickel electrodeposit having predetermined hardness gradient.*
4.	***Indian Patent # 337108** (Granted on 20/05/2020): A method and an apparatus for preparing nickel tungsten based nanocomposite coating deposition.*
5.	***US Patent # US 9,365,945** (Granted on 14/06/2016): Process for continuous coating deposition and an apparatus for carrying out the process.*
6.	***French Patent # FR 2937342** (Granted on 18/12/2015): Method for Continuous Deposition of Coatings and Apparatus for Carrying out the Method.*
7.	***US Patent # US 8,486,237** (Granted on 16/07/2013): A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process.*
8.	***JAPAN Patent # JP 5442386** (Granted on 27/12/2013): A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process.*
9.	***UK Patent # GB 2464378 (**Granted on 15/05/2013): A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process.*
10.	***GERMAN Patent # DE 102009044256** (Granted on 12/05/2010): A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process.*
11.	***SOUTHAFRICA Patent # ZA200906786B** (Granted on 26/05/2010): A Process for continuous coating deposition and an apparatus for carrying out the process.*
12.	***BRAZIL Patent # PI0904232-6 A2** (Granted on 14/09/2010): A Process for continuous coating deposition and an apparatus for carrying out the process.*
13.	***US 2022/20074066 A1** (Filed on 12-11-2021): Iron tungsten coating formulations and processes.*
14.	***US 2022/0002893 A1** (Filed on 16-09-2021): Iron tungsten coating formulations and processes.*

Technology Development, Demonstration and Transfer

*Under **make in India initiative**, the Ni-W alloy coatings developed using novel pulsed electrodeposition technology developed by me resulted in substantial improvement in coating properties than conventional hard chrome coatings, which are subjected to ban due to environmental regulations across the world, and soon in India. This led to patent filing in India and U.S.A. to cater the export potential.*

Upon successful demonstration, the technology transfer activity has been signed on 24th August 2017 with M/s Hyderabad Electroplating Works, Hyderabad India for know-how demonstration, subsequent transfer and implemented. Other major technology development activities are,

- ✓ *Development of Micro Arc Oxidation continuous coating system for thin Al foil used in oil free transformers*
- ✓ *Fatigue behavior of alumina coatings deposited using micro arc oxidation.*
- ✓ *Pulsed electrodeposition of Ni-P, Ni-Mo, Ni-B, Ni-W/SiC, Ni-W/MoS_2, Ni-B/SiC as an alternative to conventional electroless plating and development of Ni-W multilayered, gradient coatings.*
- ✓ *Micro-Tensile testing of miniature samples deposited using various coating technologies to evaluate their mechanical properties.*
- ✓ *Corrosion, wear and tribo-corrosion of various coatings developed at laboratory.*

Successfully demonstrated electrodeposited coatings of Ni-P, Ni-W, Ni-W/SiC, Nano Ni deposition on various industrial components from automobile as well as aerospace applications.

Funding (Sponsored Projects)

Principal Investigator for following funded projects:

1. *Development of Ni based (W, Mo) alloy coatings for hard chrome replacement– **SERB/DST**: INR **43 lakhs**. (Aug-2013 to 2017): Completed*
2. *Development of environment friendly Fe-W alloy coatings to replace hexavalent chrome plating funded by **Boeing**, USA: INR **25 lakhs**. (Aug-2015 to 2016): Completed*
3. *Development of Zn/Zn-Ni/Zn-Fe reinforced nanocomposite coatings using pulsed current deposition funded by **Tata Steel Ltd**: INR **40 lakhs** (Completed)*
4. *Development of hard chrome replacement Ni based alloy coatings for gun barrel applications, funded by Ministry of Defense GOI, **ARMREB**: INR **41 lakhs** (Completed)*

Peer Recognition/Awards

- ***Best Oral** presentation to PhD student under my guidance, NMD ATM 2025.*
- ***Editorial Board**: Transactions of Indian Institute of Metals, Spriger Nature.*
- *PhD Student (Dr Lavakumar Bathini) under my guidance received **'Naik and Rastogi Award for Excellance in PhD** (best PhD thesis award) 62nd Convocation at IIT Bombay.*
- *Amongst the **World Top 2% Scientists** 2025 (2024 & 2023 single year): Elsevier Data Repository Oct 2025.*
- ***The N.M. Sampat National Award** 2023 for outstanding services rendered to electrochemical science and technology by Electrochemical Society of India.*
- ***Appreciation** for delivering an **invited** talk at International_Conference and Exhibition on Emerging Materials and Technologies along with the Heat Treat Show (MET + HTS) during November 02-04, 2022 at Bombay Exhibition Centre, Goregoan East, Mumbai.*
- ***2nd Prize for the "Best Oral Presentation"** 'Compositional gradient nanocrystalline Ni-W coatings for superior wear resistance' at the "76th Annual Technical Meeting of Indian Institute of Metals-2022" NMD ATM, Hyderabad.*
- ***Best Poster Runner-up Award:** International Conference on Strength of Materials (ICSMA-2022) held at Metz, France*
- ***Best Reviewer of the Year 2020**: Transactions of Indian Institute of Metals, Springer Nature*
- ***Best Reviewer of the Year 2019**: Transactions of Indian Institute of Metals, Springer Nature*

- *Indo-Australia Early and Mid-Career Research **(EMCR)** Fellowship by Indian National Science Academy (**INSA**) for research at Queensland University of Technology, Brisbane, Australia, Sept 2017 to May 2018.*
- *Felicitation by Indian Institute of Metals **(IIM)** Hyderabad Chapter for EMCR fellowship during Annual General Body Meeting 14 September 2017.*
- ***Best Paper** of the Session Award for Poster Presentation titled "Effect of Silicon Carbide on Microstructure and Mechanical Properties of Pulsed Electrodeposited Nickel Tungsten Composite Coating" at International Conference on Emerging Trends in Materials and Manufacturing Engineering (**IMME17**) 10-12 March 2017.*
- *SERB rated project completion report '**Excellent**' and project was nominated for SERB STAR award.*
- ***Outstanding Contribution in Reviewing-2018**: Surface and Coatings Technology.*
- *All India Rank (**AIR**) **38**: Graduate Aptitude Test in Engineering (GATE) 2001: Metallurgical Engineering.*
- *Fourth Rank (Nagpur University): Metallurgical Engineering.*
- *Cover image of Pulsed Electrodeposited Zinc coating on Surface Engineering Bulletin, Vol 3, Issue 2 (2010).*
- *Article 'Influence of mode of electrodeposition, current density and saccharin on the microstructure and hardness of electrodeposited nanocrystalline nickel coatings' featured in **most cited** 'Surface and Coating Technology' articles published since 2016.*

Contributions to the institute-Managerial/Facility Establishment

***Editor:** Srujan Magazine, **Co-Chairman**: Hindi Implementation committee ARCI, **Chairman**: ARCI Annual day celebrations 2023, Organizing committee 6th Asian Thermal Spray Conference **(ATSC-2014),** Safety coordinator for center for engineered coatings at institute, Mentor to various graduate trainees at center, Set up of Rotating bending fatigue testing, Micro tensile testing, Optical microscopy, Micro-Hardness and Tribocorrosion facility at center, Set up of pulsed electrodeposition facility at center, In charge of physical verification of stock at technical information center at institute, Member search-cum-selection committee JRF, Scientist at Institute.*

Contributions outside the institute

a. *Expert panel member for Armament Materials Technology Centre, Armament R&D Establishment (ARDE) Ministry of Defence, Pune to review a project on 'Establishment of barrel manufacturing facilities for small arms'*
b. *Expert panel member for selection of best poster presentation at International Conference on Surface, Interfaces and Coatings Technologies-SICT 2024, 17-19 April 2024, Vienna Austria.*
c. *Expert panel member for Armament R&D Establishment (ARDE) Ministry of Defence, Pune to review a project on 'Development of 30 mm AO-18 barrels with nitrocarburizing treatment for Naval Guns for Indian Navy'*
d. *Reviewer of project proposals under International Cooperation (Bilateral) Programme or Scheme: India Ukraine Joint Call.*
e. *Reviewer of project proposals under International Cooperation (Bilateral) Programme or Scheme: India Uzbekisthan Joint Call.*
f. *Reviewer of project proposal under the executive government agency of National Science Centre, Polish Academy of Sciences.*
g. *Reviewer of project proposals submitted to Science and Engineering Board (SERB), Govt of India*
h. *External Examiner for PhD thesis evaluation IIT Bombay, Pune University, CECRI Karaikudi.*
i. ***Reviewer:** Progress in Materials Science, Materials Degradation (Nature), Corrosion Science, Surface and Coatings Technology, Electrochimica Acta, Journal of Materials Engineering and Performance, Journal of Alloys and Compounds, Materials and Design, Ceramic International, Applied Surface Science, Transactions of Indian Institute of Metals, Diamond and related Materials and many more SCI indexed journals*

Membership of Professional Bodies

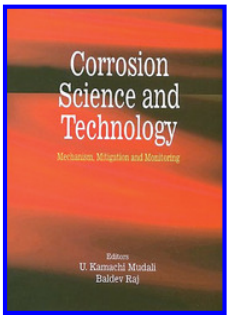
***Indian Institute of Metals** (IIM) (Life Member # **42677**)*

***Electrochemical Society of India** (Life Member# **270**)*

***Materials Research Society of India (MRSI)** (Life Member# **LMB2369**)*

***Association of Materials Protection and Performance (AMPP)** (**#11508060**)*

Publications: Books



Book Chapter in: *Corrosion Science and Technology*
Ed: U. Kamachi Mudali and Baldev Raj

- *Pub. Date: July 2008*
- *Publisher: CRC Press, Narosa Publishing House, Inc.*
- *ISBN-13: 9780849333743*
- *ISBN: 978-81-7319-910-3*

Chapter Details: Coating for Corrosion Resistance. *Page number:* ***243-283***

Publications: Journals

Listed in the end.

- *Research paper entitled "Sliding wear behavior of electrodeposited Ni-W alloy and hard chrome coatings" ranked* ***1st*** *amongst ScienceDirect top 25 most downloaded articles for Wear journal from October-December 2015.*
- *Research paper entitled "Sliding wear behavior of nanocrystalline Ni coatings: Influence of grain size" ranked at* ***8th*** *amongst ScienceDirect top 25 most downloaded articles for Wear journal from October-December 2012.*

Conference Presentations/Invited Talks

1. *Invited talk on 'Tribocorrosion in electrodeposited CoFeNi MEA coatings' at International Conference on Engineering and Functional Coatings, EnggCoat 2026 Feb 25-27 IIT Bombay.*
2. *ASME lecture series invited talk 'Compositionally modulated coatings for aerospace and automotive applications' 10th March 2025, Indian Institute of Technology Kharagapur.*
3. *Invited talk on 'Pulsed electrodeposited Ni-W for hard chrome replacement' at All India Training Programme-Industrial Metal Finishing and Allied Technologies for Aerospace and Automotive Industries (AITP-2025), 9-11 January 2025, Materials Engineering Department, IISc Bangalore, organized by Electrochemical Society of India*
4. *Nitin P. Wasekar, Lavakumar Bathini and MJNV Prasad, 'Compositionally modulated Ni-W multilayers to alleviate residual stresses in coatings for superior wear resistance' International Conference on Surface, Interfaces and Coatings Technologies-SICT 2024, 17-19 April 2024, Vienna Austria.*
5. *Delivered guest lecture at Industrial Seminar on 'Compositionally modulated Ni-W multilayers to alleviate the residual stresses in coatings for superior wear resistance' as a part of* ***M.Tech*** *curriculum on 12th Dec 2023 at Department of Metallurgical and Materials Engineering NIT Nagpur.*
6. *Invited talk 'Tribological properties of electrodeposited coatings, composites and multilayers' at Surface Engineering and Tribological Challenges in Sustainable Manufacturing, SERB sponsored Workshop (Karyashala) 18-24 Dec 2023, Birla Institute of Technology Mesra, Ranchi.*
7. *Invited talk 'Compositionally modulated Ni-W multilayers to alleviate the residual stresss in coatings for superior wear resistance' at Refresher course on Materials Science organized by UGC HRDC, Osmania University 01-16 Sept 2023 Hyderabad.*
8. *Delivered 'N. M. Sampat National Award' Lecture 'Compositionally modulated Ni-W multilayers to alleviate the residual stresses in coatings for superior wear resistance' at National Symposium on Electrochemical Science and Technology, Aug 17-18, 2023, ARCI Hyderabad Organized by Electrochemical Society of India.*
9. *Invited talk on 'Pulsed electrodeposition activities at ARCI' at National Seminar on Advanced Materials and Processes, 17-18 April 2023 for Department of Metallurgical Engineering Students at MGIT Hyderabad.*

10. *Invited talk 'The influence of grain size on corrosion resistance of metals', International Conference and Exhibition on Emerging Materials and Technologies along with the Heat Treat Show (MET + HTS) during November 02-04, 2022 at Bombay Exhibition Centre, Goregoan East, Mumbai.*
11. *Invited lecture 'Pulsed electrodeposition of nanostructured coatings: from synthesis to applications in automotive industry' in AICTE-QIP STC on Materials Engineering from synthesis to applications hosted by IIT Indore from 21-26 Feb 2022.*
12. *Invited talk 'Electroplating for defense application', Brain Storming Sessions on "Coatings for Armament Applications" 30 Jan 2020, Armament Research and Development Establishment, Ministry of Defense, Pune.*
13. *Invited talk and Panel discussion, 'Mechanism of Metal Matrix Composite Electrodeposition', Electrodeposition of composite coatings Workshop, 16-17 Dec 2019, Tata Steel Jamshedpur.*
14. *Invited talk on 'Pulsed Electrodeposition of Coatings' at All India Seminar on Advances in Metallurgy and Manufacturing Process, 13-14 July 2018 at Telangana State Centre organized by The Institute of Engineers (India).*
15. *Invited talk on 'Corrosion behavior of Pulsed Electrodeposited Ni-W/SiC nanocomposite coatings' at National Conference on Industrial Coatings, 24-25 January 2019 organized by CSIR-Institute of Minerals & Materials Technology Bhubaneswar in association with Electrochemical Society of India, IISc Bangalore.*
16. *Nitin P. Wasekar, Pulsed electrodeposition of hard chrome replacement coatings, ARCITECEx-2017 Business Opportunity workshop on Surface Engineering Feb 27-28, 2017.*
17. *Nitin P. Wasekar, D. S. Rao, G. Sundararajan, Dry sliding wear behavior of pulse electrodeposited Ni-W-SiC nanocomposite coatings as an alternative for hard chrome replacement, Euromat 2015, Sept 20-24, Warsaw, Poland.*
18. *Invited talk 'Pulsed electrodeposition of hard chrome replacement coatings' Five day school on Surface Engineering Technologies: Research and Applications (SETRA) August 27-31, 2012, TR Anantharaman Education and Research Foundation, Hyderabad.*
19. *Nitin P. Wasekar, G. Sundararajan, Prathap Haridoss and S K Seshadri. Mechanical Properties of Nanocrystalline graded and layered Ni coatings, International Symposium for Research Scholars on Metallurgy, ISRS-2010, 20-22 Dec, IITM Chennai India.*
20. *Presented a paper on 'MAO Alumina coatings' in Technical Session of 2nd International Conference on High-Tech Aluminas and Unfolding their business prospects (ALUMINAS-2010) held during 25-27 November 2010 at CGCRI Kolkata.*
21. *Nitin P Wasekar, G. Sundararajan, L. RamaKrishna, N. Ravi. High Cycle Fatigue Performance of Micro Arc Oxidation Coatings deposited on 6061 Al alloy at 32nd International Conference & Exposition on Advanced Ceramics and Composites (ICACC-2008) Jan 27-Feb1, Daytona Beach, Florida, USA.*
22. *Nitin P. Wasekar, A. Jyothirmayi, G. Sundararajan. Corrosion Behavior of Micro Arc Oxidation coatings at National Symposium on Electrochemical Science and Technology, Indian Institute of Science Bangalore, 22-23 July 2005, conducted by The Electrochemical Society of India, Bangalore.*
23. *B. Lavakumar, **Nitin P. Wasekar**, MJNV Prasad, 'Compositional gradient nanocrystalline Ni-W coatings for superior wear resistance' at the "76th Annual Technical Meeting of Indian Institute of Metals-2022" NMD ATM, Hyderabad.*
24. *B. Lavakumar, **Nitin P. Wasekar**, MJNV Prasad, Compositional gradient nanocrystalline Ni-W coatings and their improved contact resistance, 19th International Conference on Strength of Materials (ICSMA-19), France June 28, 2022.*
25. *G. Sundararajan, **Nitin P. Wasekar**, Solid particle erosion behavior of electrodeposited nanocrystalline nickel coatings. **MS&T 2015**, Oct 4-8, Columbus, Ohio, USA.*
26. *Haveela P, Manoj Prabakar, Pramod SL, **Nitin Wasekar**, Seshadri SK, Lakshman Neelakantan and Srinivasa R. Bakshi. Effect of texture and grain size on the nanomechanical properties of electrodeposited Ni coatings. Nanomechanical Testing Workshop & Hysitron User Meeting (Nanoyantrika-2015), 20-22 September 2015, Trivandrum, India.*
27. *S. K. Gautham, C. David, M.S. Karthiselva, B.K. Panigrahi, **Nitin P. Wasekar**, B. Sriniavasa Rao. The effect of nanocrystalline grain size on mechanical property variation during irradiation of electrodeposited nickel coatings. **TMS-2014**, Feb 16-20, San Diego, CA, USA.*
28. *G. Sundararajan and **Nitin P. Wasekar,** Influence of tungsten additions on mechanical and tribological behavior of pulsed electrodeposited nanocrystalline nickel coatings. International Conference on Processing and Manufacturing of Advanced Materials, **THERMEC-2013**, Dec 2-6 2013, Las Vegas, USA.*

29. G. Sundararajan and **Nitin P. Wasekar**, *Solid particle erosion behavior of nanocrystalline nickel coatings: Influence of grain size and adiabatic shear bands.* ***MS&T-2013****, Montreal,Quebec, Oct 27-31, Canada.*
30. G. Sundararajan, **Nitin P. Wasekar,** *The Tribological Behaviour of Graded Nanocrystalline Nickel Coatings,* ***TMS-2010****, 139th Annual Meeting and Exhibition, Feb 14-18, Seattle, Washington, USA.*
31. G. Sundararajan, P. S. Phani, **Nitin P. Wasekar**. *Indentation Behavior of Porous Copper,* ***3rd International Indentation Workshop,*** *15-21st July 2007, Cambridge, United Kingdom.*

List of Publications: Q1- 40, Q2- 9, Q3- 2, Average Impact Factor: 4.92

1. *Nitin P. Wasekar, Kaustubh Prabhu, Phani Chalapaka, Niharika Yettam, Bhavani Challarapu, L. Rama Krishna, and Gangadharudu Talla. "Synergy between Wear and Corrosion in Electrodeposited Ni-W and Hard Chrome Coatings." Wear (2026): 206600.* ***(IF: 6.1, Q1)***
2. *GN Devi, S Kumar, NP Wasekar, A Kanchi, AV Gopal, Impact of Initial Feedstock on Corrosion Behavior of Cold-Sprayed Nickel Coatings, Journal of Thermal Spray Technology (2026).* ***(IF: 3.3, Q2)***
3. *Abhishek Soni, A Kumaraswamy, B Praveen Kumar, Nitin P Wasekar, Tribomechanical Characterization of Pulsed Electrodeposited NiW Coatings on 4150 Steel, J. of Materi Eng and Perform (2025).* ***(IF: 2, Q2)***
4. *Nitin P. Wasekar, B. Lavakumar, strengthening mechanisms and tribological aspects of ceramic particle reinforced electrodeposited metal matrix composites-A review, Journal of Alloys and Compounds 1037 (2025) 182288.* ***(IF: 6.3, Q1)***
5. *D. Vijaya Lakshmi, P. Suresh Babu, Nitin P. Wasekar, G. Sivakumar, M.J.N.V. Prasad, Electrochemical corrosion behavior of thin and thick WC-10Co-4Cr coatings deposited by HVAF thermal spray technique, Surface and Coatings Technology, Volume 511, 2025, 132318.* ***(IF: 6.1, Q1)***
6. *Raju, A., Babu, A.V., Kumar, B.P. Prabhu K, Sarada B.V., Rama Krishna L and Nitin P. Wasekar. Influence of Sliding Velocity on Wear Behavior of Electrodeposited Ni-W and Hard Chrome Coatings on Gun Barrel Steel. J. of Materi Eng and Perform (2025).* ***(IF: 2, Q1)***
7. *S Julie, Ch Jagadeeswara Rao, C. David, Rupesh Kumar, Kishore Kumar Madapu, S Chinnathambi, Nitin P. Wasekar, AA Sukumar, K Sunder Krishna, High-Temperature Corrosion of Nanocrystalline Ni with Varying Grain Sizes in Flinak Salt and Corrosion-Induced Surface Faceting, Surfaces and Interfaces, 53 (2024) 105052.* ***(IF: 6.3, Q1)***
8. *Padmaganesan, Haripria T., B. Lavakumar, Akihiro Choshi, Naoki Takata, Nitin P. Wasekar, and M. J. N. V. Prasad, Achieving Exceptional Strain-Hardening Ability in Nanocrystalline Ni-W Coatings through Compositionally Modulated Multilayer Approach, Materials Science and Engineering A 912 (2024) 146971.* ***(IF: 7, Q1)***
9. *Lavakumar, B., Wasekar, N.P., Srilakshmi, T.S., D. Sivaprahasam, L. Ramakrishna, DS Rao, An insight into the role of boron content and heat treatment on the corrosion behaviour of Ni–B coatings, J. Materials Science, 59 (2024) 11030.* ***(IF:3.9, Q1)***
10. *Soni, A., Kumaraswamy, A., Praveen Kumar, B. Nitin P. Wasekar, Krishna Valleti, Indentation size effects in hardness of annealed NiB coatings, MRS Communications, 14 (2024) 402.* ***(IF:2.3, Q3)***
11. *B Lavakumar, HT Padmaganesan, M Prasad, NP Wasekar, Enhanced solid particle erosion resistance of nanocrystalline NiW coatings through multilayer approach, Surface and Coatings Technology, 483 (2024) 130770.* ***(IF: 6.1, Q1)***
12. *S Julie, C David, NP Wasekar, PK Parida, C Ghosh, Revealing the impact of sink strength, injected interstitial and grain growth on the temperature-dependent depth distribution of voids in nanocrystalline Ni, Surfaces and Interfaces 46 (2024) 103938.* ***(IF: 6.3, Q1)***
13. *Nitin P. Wasekar, Compositionally modulated Ni-W multilayers to alleviate the residual stresses in coatings for superior wear resistance, Journal of Electrochemical Society of India, 72(3-4) (2023) 90-99.*
14. *VNV Munagala, NP Wasekar, L Bathini, L Ramakrishna, G Sundararajan, Deciphering the role of W content, triple junctions, and heat treatment on the corrosion performance of Ni–W alloy coatings used for automotive applications, Materials Chemistry and Physics, 308 (2023) 128305.* ***(IF: 4.7, Q1)***
15. *S Julie, K Mariappan, C David, NP Wasekar, V Shankar, A study on the competition and synergy between irradiation and temperature on the texture and recrystallization of nanocrystalline nickel, Applied Surface Science 638 (2023) 158085.* ***(IF: 6.9, Q1)***

16. *L Bathini, M Prasad, P. S. Phani, NP Wasekar, Influence of compositional and microstructural gradient on the wear performance of nanocsrystalline Ni-W coatings, Wear 530-531 (2023) 205039.* ***(IF: 6.1, Q1)***
17. *H. Seekala, L. Bathini, N.P. Wasekar, H. Krishnaswamy, P Sudharshan Phani, A unified approach to quantify the material and geometrical effects in indentation size effect. Journal of Materials Research 38 (2023) 1740-1755.* ***(IF:2.9, Q2)***
18. *SB Chandrasekhar, M Ramakrishna, NP Wasekar, TN Rao, BP Kashyap, Grain boundary and grain interior strengthening in nano-micron grain sized Cu-1wt.%Al_2O_3 composite, Materials Science and Technology, 39 (11) (2023) 1313-1321.* ***(IF:2.2, Q2)***
19. *L Bathini, M Prasad, NP Wasekar, Compositionally modulated Ni-W multilayer coatings: A facile approach to enhance the tribological performance, Tribology International, 179 (2023) 108145.* ***(IF:6.9, Q1)***
20. *L Bathini, M Prasad, NP Wasekar, Development of continuous compositional gradient Ni-W coatings utilizing electrodeposition for superior wear resistance under sliding contact, Surface and Coatings Technology 445 (2022) 128728.* ***(IF: 6.1, Q1)***
21. *Nitin P. Wasekar, Anthony P.O'Mullane, Md AbuSayeed, G.Sundararajan, Influence of SiC reinforcement content and heat treatment on the corrosion behavior of pulsed electrodeposited Ni-W alloy metal matrix composite, Materialia, 22 (2022) 101390.* ***(IF: 2.9, Q2)***
22. *Nitin P. Wasekar, The influence of grain size and triple junctions on corrosion behavior of nanocrystalline Ni and Ni-W alloy, Scripta Materialia, 213 (2022) 114604.* ***(IF: 5.6, Q1)***
23. *S Julie, Nitin P. Wasekar, PK Parida, S Santra, C David, M Kamruddin, Effect of Grain Size on the Thermal Stability of Electrodeposited Nanocrystalline Nickel: X-Ray Diffraction studies, Thin Solid Films 745 (2022) 139114.* ***(IF: 2, Q2)***
24. *S Julie, MK Dash, Nitin P. Wasekar, C David, M Kamruddin, Effect of annealing and irradiation on the evolution of texture and grain boundary interface in electrodeposited nanocrystalline nickel of varying grain sizes, Surface and Coatings Technology 426 (2021) 127770.* ***(IF: 6.1, Q1)***
25. Nitin P. Wasekar, Lavakumar Bathini, L. Ramakrishna, D. *Srinivasa Rao and G. Padmanabham, Pulsed electrodeposition, mechanical properties and wear mechanism in Ni-W/SiC nanocomposite coatings used for automotive application, Applied Surface Science 527 (2020) 146896.* ***(IF: 6.9, Q1)***
26. *Nitin P. Wasekar, N. Hebalkar, A. Jyothirmayi, B. Lava Kumar, M. Ramakrishna and G. Sundararajan, Influence of pulse parameters on the mechanical properties and electrochemical corrosion behavior of electrodeposited Ni-W alloy coatings with high tungsten content, Corrosion Science 165 (2020) 108409.* ***(IF: 8.5, Q1)***
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