Curriculum Vitae

PARTHA PRATIM BANDYOPADHYAY, Professor
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Website: https://sites.google.com/site/ppbsurface/

EDUCATION: Ph.D. (IIT Kharagpur, 2000), M.Tech (IIT Kharagpur, India 1992),

B.Prod.E. (1989), Jadavpur University, Calcutta, India)

AREA OF SPECIALISATION: Surface Technology

TEACHING: Theory of Machining (PG course), Surface Engineered Materials Technology (dual degree course) Machining and Machine Tools (UG course), Introduction to manufacturing (Lab), Machine tools and machining lab.

RESEARCH GUIDANCE: Postdoc – 1, PhD (12 awarded + 5 working + 1 submitted); M Tech: 25

CURRENT RESEARCH ACTIVITIES

- Micro and nanofinishing of thermally sprayed coatings
- Carbon nanotube reinforced thermally sprayed coatings
- Thermally sprayed coatings with solid lubricant additive
- Splat-substrate interaction
- Prediction of wear in thermally sprayed coating

FACIITIES OF THE LABORATORY

- Metco 9 M, 80 kW APS facility
- DPV evolution and Accuraspray particle monitors
- Facility for metallography, microscopy, microhardness, scratch test, tribometry including Anton Paar high temperature tribometer, ball milling, SEM and XRD
- A well-equipped workshop
- Central facilities for FE-SEM, TEM, HRTEM,EPMA, Nanoindenter etc.

MAJOR SPONSORED PROJECTS

Designation	Project title	Sponsor	Duration	Fund
PI	Thermally sprayed CNT reinforced WC-Co Coating for Aero Engine Stage III & IV compress discs.	AR&DB	Sept 20-Aug 23	324.97 Lakh
PI	Measurement of residual stress in plasma sprayed yttria stabilized zirconia splats using	Swiss Nat. Sc	May- July, 2018	6.5 lakh

	micro-Raman spectroscopy	Foundation		
PI	Deposition of Thermally Sprayed WC-Co Coating with Carbon Nanotube Reinforcement: A Feasibility Study	AR&DB	Nov 2015-March 2017	23.75 lakh
PI	Development and Performance Evaluation of Thermally Sprayed Ball Milled Diamond Metal Composite Powder for Bearing Surface Application	DST	Feb 13-Mar 17	44 lakh
Co-PI	Study of High Speed Deep Grinding of Burn Resistant Titanium Alloy & Ceramics Using Monolayer Electroplated Super-Abrasive Wheel	AR & DB	Feb 16-Jan 19	151.77 lakh
PI	Adhesion in cold spraying	INSA-DFG grant	May-July, 2015	4.5 lakh
PI	Investigation of Interfacial Bonding in Thermally Sprayed Coatings using Glow Discharge Optical Emission Spectroscopy (GDOES) Depth Profiling	Swiss Nat. Sc. Foundation	May-July 2012	5 lakh
PI	Measurement of residual stress in thermally sprayed ceramic splats using Raman spectroscopy	DST-Swiss Nat. Sc. Foundation	Dec-2010	6 lakh
Co-PI	Intelligent data mining for forward and reverse modelling of manufacturing processes	DST-SERC	May 2008-April 2011	15 lakh
PI	Hard chrome replacement solution	ISIRD	March 2006- Feb 2009	5 lakh
Co-PI	Upgrading existing plasma spray facility with particle monitoring capability	DST-FIST	March 2008-March 2013	25 lakh
Co-PI	Computer Assisted Wire Cut EDM laboratory	DST-FIST	March 2003- Feb 2008	40 lakh

INTERNATIONAL

May-July 2023, School of Engineering and Architecture Fribourg, Switzerland, Measurement of residual stress in plasma sprayed ceramic coatings using FTIR and Raman microscopy. Swiss National Sc. Foundation Grant.

May-July, 2018, School of Engineering and Architecture Fribourg, Switzerland, Measurement of residual stress in splats using Raman Spectroscopy. Swiss National Sc. Foundation Grant.

May-July, 2015, Helmut Schmidt Univ, Humburg, Germany, Adhesion in Cold Spraying, INSA-DFG Research grant.

December, 2014, Univ of Sc. and Tech. Lille, 1, France, Nanoindentation on thermally sprayed coatings.

May – July, 2012, Swiss Nat. Sc. Foundation Visiting Fellow, BFH Biel, Switzerland. Research topic: GDOES depth profiling of thermally sprayed coatings.

May – June, 2011, Visiting professor, Univ of Lille 1, France. Research topic: instrumented indentation based property measurement of thermally sprayed coatings.
Nov- Dec, 2010, Visiting Scientist, EMPA Thun, Switzerland. Research topic: Residual stress measurement in isolated thermally sprayed splats using micro Raman and FTIR microscopy.

May – June, 2010, Visiting professor, Univ of Lille 1, France. Research topic: estimation of coating adhesion by measuring interfacial fracture toughness.

August – Dec, 2009, Visiting Scientist, EMPA Thun, Switzerland. Topic: Splat substrate interaction
May – July, 2008: Visiting Scientist, EMPA Thun, Switzerland. Topic: Tribo-characterisation of Ti- Cr-Si-O coatings

May – July, 2007: Visiting Scientist, EMPA Thun, Switzerland. Topic: Processing of Ti-Cr-Si- O quasicrystal coatings.

May – July, 2006: Visiting Scientist, Washington State Univ, Pullman, USA. Topic: laser clad alumina and zirconia on steel

Sep 2002 – Jan 2004: Research Assoc. EMPA Thun, Switzerland. Topic: Vacuum Plasma Sprayed Ni-Ti-Zr quasicrystal coatings.

ADMINISTATION:

1. Professor in Charge of Training Workshop

2. PhD coordinator, Department of Mechanical Engineering

Pedagogic Material: Developed a 40 lecture pedagogic material on Machine Tools and Machining

List of publications

Book Chapters

8 Saha, S., Sikdar, S., Kumar, A.S., Deb, S., **Bandyopadhyay, P.P.** (2023). Dependency of Machining Forces on Process Parameters During Sustainable MQL-Based Micro-milling of D2 Steel. In: Bhattacharyya, B., Mathew, J., Saravanakumar, N.,

Rajeshkumar, G. (eds) Advances in Micro and Nano Manufacturing and Surface Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore., pp 119-128, https://doi.org/10.1007/978-981-19-4571-7_11

7 Rajib Das, Vibhav Ambardekar*, **Partha Pratim Bandyopadhyay,** Titanium Dioxide and its Applications in Mechanical, Electrical, Optical and Biomedical Fields, in **Titanium Dioxide**,1st Edition, Editor: Dr. Hafiz Muhammad Ali, ISBN 978-1-83969-476-9, IntechOpen 2021 , pp. 1-25.

6 Gourhari Ghosh, Mayank Kumar, Ajay M. Sidpara*, and **Partha P. Bandyopadhyay**, Tribological aspects of different machining processes, in Machining and Tribology 1st Edition. Processes, Surfaces, Coolants, and Modeling, Editor: Alokesh Pramanik. Paperback ISBN**:** 9780128198896, Elsevier **2021,** pp. 213-238**.**

5 Gourhari Ghosh, Ajay Sidpara* and **P P Bandyopadhyay,** Post processing of HVOF sprayed WC-Co coating to enhance its performance, In: Hashmi, Saleem and Choudhury, Imtiaz Ahmed (eds.). *Encyclopedia of Renewable and Sustainable Materials,* vol. 1, pp. 658–673, **2020**. Oxford: Elsevier.

4 Tynee Bhowmick, Vibhav Ambardekar, Abhishek Ghosh, Moumita Dewan, **Partha Pratim Bandyopadhyay**, Sudip Nag and Subhasish Basu Majumder*, Multilayered and Chemiresistive Thin and Thick Film Gas Sensors for Air Quality Monitoring, Multilayer Thin Films - Versatile Applications for Materials Engineering, Sukumar Basu, IntechOpen ,(January 15th **2020**). DOI: 10.5772/intechopen.89710., pp. 1-47.

3 V. Ambardekar, **P.P. Bandyopadhyay*,** and S.B. Majumder, Atmospheric Plasma Sprayed 25 wt.% WO3-75wt.% SnO2 Composite Coating: Investigations on Ethanol and Acetone Sensing Characteristics, Advances in Micro and Nano Manufacturing and Surface Engineering, Chapter 64, 711-719, First Online: 01 December **2019**, https://doi.org/10.1007/978-981-32-9425-7_64, Springer, Singapore, Print ISBN 978-981-32-9424-0, Online ISBN 978-981-32-9425-7

2 Gourhari Ghosh, Ajay Sidpara* and **P P Bandyopadhyay**, Fabrication of Optical Components by Ultraprecision Finishing Processes, in, K Gupta (ed), Micro and Precision Manufacturing, Springer International Publishing AG, ISBN:978-3-319-68800- 8, pp 87-119, **2018**.

1 V. Bolleddu, V. Racherla, **P.P. Bandyopadhyay***, Microstructural and tribological characterization of air plasma sprayed alumina–titania coatings in A H Pakseresht (ed) Production, Properties, and Applications of High Temperature Coatings, IGI Global, Hershey, PA, USA, pp. 268-298, **2018** **DOI: 10.4018/978-1-5225-4194-3.ch011,** ISBN 9781522541943 (hardcover) |ISBN 9781522541950 (eISBN)

Peer Reviewed Journals

Sl. No.		Impact factor
102	Rajib Das, Subham Sarkar, **P P Bandyopadhyay***, Effect of spray parameters on the microstructure, solid lubricant phase retention, and high-temperature tribological performance of plasma sprayed YSZ/BaF2 composite coatings, **Journal of the European Ceramic Society**, 44 (**2024**) 5166-5180.	**5.7**
101	Suman saha, Sainul Islam, Sankha Deb, **Partha Pratim Bandyopadhyay***, Influence of tool wear on chip-like burr formation during micro-milling, and image processing based measurement of inwardly-deflected burrs, ***Wear***, 530-531 **(2023)** 205024. https://doi.org/10.1016/j.wear.2023.205024	**4.695**
100	Tina Ghara and **P. P. Bandyopadhyay***, Splat Shape and Pore Size Distribution in Plasma Sprayed Alumina Coating at Various In-flight Particle Conditions, **J Therm Spray Tech**, available online, **May 2023** https://doi.org/10.1007/s11666-023-01609-y	**2.839**
99	Energy balance model to predict the critical edge radius for adhesion formation with tool wear during micro-milling, Suman Saha , A. Sravan Kumar, Ganesh Malayath , Sankha Deb , **P P Bandyopadhyay***, **Journal of Manufacturing Processes** 93 (**2023**) 219–238. https://doi.org/10.1016/j.jmapro.2023.03.034	**5.684**
98	Suman Saha, Sankha Deb, **P P Bandyopadhyay***, Tool wear induced burr formation and concomitant reduction in MQL wetting capability in micro-milling, **International Journal of Mechanical Sciences**, 245 (**2023**),108095; https://doi.org/10.1016/j.ijmecsci.2022.108095	**6.672**
97	Gourhari Ghosh, A Sidpara and **P P Bandyopadhyay**, Performance improvement of magnetorheological finishing using chemical etchant and diamond-graphene based magnetic abrasives, **Precision Engineering,** 79 (**2023**) 221–235**. https://doi.org/10.1016/j.precisioneng.2022.10.008**	**3.315**
96	Akash Chowdhury, A Bhattacharya, **P. P. Bandyopadhyay***, Effect of polymer substrate elasticity on splat formation during thermal spraying, available online in **Surface and Coating Technology**, Volume 447, 15 October 2022, pp- 128843 , https://doi.org/10.1016/j.surfcoat.2022.128843	**4.865**
95	**Tina Ghara and P P Bandyopadhyay***, Adhesion in Thermally Sprayed	**4.186**

Coatings: An Insight from Interfacial Residual Stress, available online in **Journal of the American ceramic Society**, 105(12) (**2022**) 7132-7148 https://doi.org/10.1111/jace.18713

94 Rajib Das and **P P Bandyopadhyay***, Processing of solid lubricant doped ceramic powder feedstock using heterocoagulation technique for plasma spraying, **Ceramic International**, 48 (2022) 25592–25609 https://doi.org/10.1016/j.ceramint.2022.05.239 **5.532**

93 Tina Ghara and **P P Bandyopadhyay*,** Mechanical Properties and Residual Stress Depth Profiles of Plasma Sprayed Ceramic Coatings Deposited under Comparable Particle Temperature and Velocity, accepted in **Journal of Thermal Spray Technology**, (2022)31:1889–1905, https://doi.org/10.1007/s11666-022-01412-1 **2.839**

92 Tina Ghara and **P P Bandyopadhyay*,** Understanding the Role of In-flight Particle Temperature and Velocity on the Residual Stress Depth Profile and Other Mechanical Properties of Atmospheric Plasma sprayed Al2O3 Coating, **Journal of the European Ceramic Society**, 42 (**2022**) 4353- 4368. https://doi.org/10.1016/j.jeurceramsoc.2022.04.019 **6.364**

91 V. Ambardekar, T. Bhowmick, **P.P.Bandyopadhyay,** Understanding on the hydrogen detection of plasma sprayed tin oxide/tungsten oxide (SnO2/ WO3) sensor, **International Journal of Hydrogen Energy**, **(2022),** 47 (33) (2022) 15120-15131 **https://doi.org/10.1016/j.ijhydene.2022.03.005** **7.139**

90 Suman Saha, Sankha Deb, **Partha Pratim Bandyopadhyay***, Shadow zone in MQL application and its influence on lubricant deficiency and machinability during micro-milling, ***International Journal of Mechanical Sciences***, 220 **(2022)** 107181 https://doi.org/10.1016/j.ijmecsci.2022.107181 **6.772**

89 Tina Ghara, Soumitra Paul, **Partha Pratim Bandyopadhyay***, Analytical and experimental analysis of indentation depth upon abrasive impact on metallic substrates, ***Materials Chemistry and Physics***, 280 **(2022)** 125865. https://doi.org/10.1016/j.matchemphys.2022.125865 **4.778**

88 Suman Saha, Sankha Deb, **P P Bandyopadhyay***, Precise measurement of worn-out tool diameter using cutting edge features during progressive wear analysis in micro-milling, ***Wear***, 4888-489 (**2022**), 204169 **4.695**

87 Suman Saha, Sankha Deb, **P P Bandyopadhyay***, Progressive wear based tool failure analysis during dry and MQL assisted sustainable micro-milling, ***International Journal of Mechanical Sciences*** 212 (**2021**) 106844. **6.772**

86 V. Ambardekar, T. Bhowmick, **P.P.Bandyopadhyay**, S.B.Majumder, Ethanol and acetone sensing properties of plasma sprayed copper oxide coating, **4.383**

Journal of Physics and Chemistry of Solids, 160 **(2021)** 110333.

85 Akash Chowdhury, A Bhattacharya, **P. P. Bandyopadhyay***, Influence of temperature dependent physical properties on liquid metal droplet impact dynamics, **Journal of Thermal Science and Engineering Applications, ASME,** 14 (May **2021**) 051001-6 **1.879**

84 Gourhari Ghosh, A Sidpara and **P P Bandyopadhyay,** Theoretical and experimental investigation of material removal rate in shape adaptive grinding of HVOF sprayed WC-Co coating, **Precision Engineering**, 72 **(2021)** 627-639 **3.315**

83 Gourhari Ghosh, A Sidpara and **P P Bandyopadhyay,** Theoretical analysis of magnetorheological finishing of HVOF sprayed WC-Co coating, **International Journal of Mechanical Sciences,** 207 **(2021)** 106629**.** **6.772**

82 **Gourhari Ghosh, A Sidpara and P P Bandyopadhyay,** Brittle-ductile transition in compliant finishing of HVOF sprayed hard WC-Co coating, **International Journal of Refractory Metals and Hard Materials**, 99 **(2021)** 105610 **4.804**

81 V. Ambardekar, T. Bhowmick, **P.P. Bandyopadhyay*,** S.B. Majumder, Understanding on the effect of morphology towards the hydrogen and carbon monoxide sensing characteristics of tin oxide sensing elements, **Int. J Hydrogen energy**, 46 (**2021**) 23113- 23123. **7.139**

80. V.Ambardekar, S.Sahoo, D.K.Srivastava, S.B.Majumder, **P.P.Bandyopadhyay*,** Plasma sprayed CuO coatings for gas sensing and catalytic conversion applications, **Sensors & Actuators: B. Chemical**, 331 (**2021**) 129404. **9.221**

79 Biswajit Das, Kumar Sawrav Shiv Brat Singh, **P. P. Bandyopadhyay***, Tribological behavior of the hardfacing alloys utilized to fabricate the wear parts of excavator bucket, **Transaction of the IMF,** 99(3) (**2021**) 153-161. **1.679**

78 Gourhari Ghosh , Ajay Sidpara , **P.P. Bandyopadhyay**, Magnetorheological finishing of WC-Co coating using iron-B4C-CNT composite abrasives, **Tribology International**, 155 (**2021**) 106807 **5.620**

77 Biswajit Das, Muvvala Gopinath, Ashish Kumar Nath, **P. P. Bandyopadhyay*,** Online monitoring of thermo cycles during laser remelting of flame sprayed chromia coating in pulsed mode and coating properties, **Optik,** 227 (**2021**) 166030. **2.840**

76 Tina Ghara, S. Paul, **P. P. Bandyopadhyay***, Effect of Grit Blasting Parameters on Surface and Near-Surface Properties of Different Metal Alloys, **J Thermal Spray Technol.**, (**2021**) 30:251–269. **2.839**

75 Tina Ghara, S Paul and **P P Bandyopadhyay*,** Influence of Grit Blasting on Residual Stress Depth Profile and Dislocation Density in Different Metallic Substrates, **Met & Mat Trans A**, 52A, January **2021**, 65-81 **2.726**

74 V. Ambardekar, **P.P. Bandyopadhyay*,** S.B. Majumder, Plasma sprayed copper oxide sensor for selective sensing of carbon monoxide, **Material Chemistry and Physics,** 258 (**2021**) 123966 **4.778**

73 Gourhari Ghosh, Ajay Sidpara and **P P Bandyopadhyay**, Experimental and theoretical investigation into surface roughness and residual stress in magnetorheological finishing of OFHC copper, **J Mater. Processing Tech**. 288 (**2021**) 116899 **6.162**

72 S. Kar, A. Sravan Kumar, **P. P. Bandyopadhyay** & S. Paul, Grindability of plasma sprayed thermal barrier coating using super abrasive wheel, **Transaction of the IMF** 98 (3), 144-153, **2020**. **1.679**

71 S Hazra, **P P Bandyopadhyay**, Tribological properties of plasma sprayed zircon-alumina powder mixture with and without laser re-melting, **Transaction of the IMF** 98 (3), 144-153, **2020**. **1.679**

70 Suman Saha, Sankha Deb and **P P Bandyopadhyay***,An analytical approach to assess the variation of lubricant supply to the cutting tool during MQL assisted high speed micromilling, **J Mat Proc. Technol**, 285 (**2020**) 118783 **6.162**

69 Gourhari Ghosh, Ajay Sidpara and **P. P. Bandyopadhyay**, Fabrication of mechanically durable slippery surface on HVOF sprayed WC-Co coating, **Surf. Coat. Technol**., 394 (**2020**) 125886 **4.865**

68 S. Kar, A. Sravan Kumar, **P. P. Bandyopadhyay** and S. Paul, Grinding of hard and brittle ceramic coatings: Force analysis, **J. Eur. Cer. Soc**., 40(**2020**)1453- 1461. **6.364**

67 Grindability of plasma sprayed thermal barrier coating using super abrasive wheel, S Kar, AS Kumar, **P P Bandyopadhyay**, S Paul, **Transactions of the IMF** 98 (1), 30-36, **2020** **1.679**

66 SC Jambagi, **P P Bandyopadhyay*,**Improvement in Tribological Properties of Plasma-Sprayed Alumina Coating upon Carbon Nanotube Reinforcement **Journal of Materials Engineering and Performance** 28 (12), 7347-7358, **2019** **2.036**

65 V. Ambardekar, **P.P. Bandyopadhyay*,** and S.B. Majumder, Sensing Capability of Air Plasma-Sprayed SnO2 Coating in the Presence of Hydrogen and Carbon Monoxide, **J. Mat. Eng. and Performance**, (**2019**) 28:6728–6735. **2.036**

64 Gourhari Ghosh, Ajay Sidpara and **P. P. Bandyopadhyay**, Understanding the role of surface roughness on the tribological performance and corrosion resistance of WC-Co coating, **Surf. Coat. Technol**.378 (**2019**) 125080. **4.865**

63 Biswajit Das, Pierre Brodard, **P.P. Bandyopadhyay*,** Raman spectroscopy assisted residual stress measurement of plasma sprayed and laser remelted **4.865**

zirconia splats and coatings, **Surface and coating technology**, 378 (**2019**) 124920

62 V Ambardekar, **P P Bandyopadhyay,** S B Majumder, Hydrogen sensing performance of atmospheric plasma sprayed tin dioxide coating, **International Journal of Hydrogen Energy**, 44(**2019**) 14092-14104. **7.139**

61 V Ambardekar, **P P Bandyopadhyay,** S B Majumder**,** Understanding on the ethanol sensing mechanism of atmospheric plasma sprayed 25 wt. % WO3-75 wt. % SnO2 coating, **Sensors and Actuators B Chemical**, 290 (**2019**) 414-425. **9.221**

60 Gourhari Ghosh, A Sidpara and **P P Bandyopadhyay**, An investigation into the wear mechanism of zirconia-alumina polishing pad under different environments in shape adaptive grinding of WC-Co coating, **Wear** 428- 429 (**2019**) pp 223-236. **4.695**

59 Biswajit Das, Ashish Nath, **P. P. Bandyopadhyay*,** Scratch resistance and damage mechanism of laser remelted thermally sprayed ceramic coating, **Surface and Coating Technology**, 364 (**2019**) 157-169. **4.865**

58 Purnendu Das, S Paul and **P P Bandyopadhyay*,** Tribological behaviour of HVOF sprayed diamond reinforced bronze coatings, **Diamond and related materials**, 93(**2019**)16-25. **3.806**

57 Purnendu Das, S Paul and **P P Bandyopadhyay*,** Tribological behaviour of plasma sprayed diamond reinforced molybdenum coatings, **Int J of refractory and hard mater.**, 78 (**2019**) 350-359. **4.804**

56 SC Jambagi, A Agarwal, N Sarkar, **PP Bandyopadhyay***, Plasma-sprayed titania and alumina coatings obtained from feedstocks prepared by heterocoagulation with 1 wt.% carbon nanotube, **Journal of Materials Engineering and Performance** 27 (5), (**2018**), 2364-2372 **2.036**

55 Purnendu Das, S Paul and **P P Bandyopadhyay*,** Plasma sprayed diamond reinforced molybdenum coatings, **J. Alloys and Compounds**, 767(**2018**) 448-455. **6.371**

54 Deviprasanna Mohanty, Simanchal Kar, Soumitra Paul, **P P Bandyopadhyay***, Carbon nanotube reinforced HVOF sprayed WC-Co coating, **Materials and Design**, 156 (**2018**) 340-350. **9.417**

53 Gourhari Ghosh, Ajay Sidpara and **P P Bandyopadhyay,** Comprehensive study to evaluate the lifespan of flexible polishing pads by 3D surface characterization technique, **Measurement**. 127(**2018**) 29-41 **5.131**

52 V.Ambardekar, **P. P. Bandyopadhyay**, S. B. Majumder, Atmospheric plasma sprayed SnO_2 coating for ethanol detection, **J Alloys and Compounds**, 752(**2018**) 440-447. **6.371**

51 Biswajit Das, Muvvala Gopinath, Ashish Kumar Nath, **P. P. Bandyopadhyay*,** Effect of cooling rate on residual stress and mechanical properties of laser remelted **6.364**

ceramic coating, **Journal of the European Ceramic Society**, 38(**2018**) 3932-3944.

50	Purnendu Das, S Paul and **P P Bandyopadhyay***, HVOF sprayed diamond reinforced nano-structured bronze coatings, **J Alloys and Compounds**, 746 (**2018**) 361-369.	**6.371**
49	Biswajit Das, A K Nath and **P P Bandyopadhyay*,** Online monitoring of laser remelting of plasma sprayed coatings to study the effect of cooling rate on residual stress and mechanical properties, **Ceramic International**, 44(7) (**2018**)7524-7534.	**5.532**
48	Gourhari Ghosh, Ajay Sidpara, **P.P. Bandyopadhyay**, High efficiency chemical assisted nanofinishing of HVOF sprayed WC-Co coating, **Surface and Coating Technology**, 334 (2018) 204–214.	**4.865**
47	Simanchal Kar, **P P Bandyopadhyay** * and S. Paul, High speed and precision grinding of plasma sprayed oxide ceramic coatings, **Ceramics International**, 43 (**2017**) 15316-15331.	**5.532**
46	Simanchal Kar, **P P Bandyopadhyay** * and S. Paul, Effect of arc-current and spray distance on elastic modulus and fracture toughness of plasma sprayed chromium oxide coatings, **Friction** 6 (4), 387-394, **2017**, doi.org/10.1007/s40544-017-0166-6	**4.924**
45	Jambagi, S. C. and **Bandyopadhyay, P.P***, 2017. Scratch Resistance of Plasma Sprayed Carbon Nanotube Reinforced Splats and Coatings. **Journal of the European Ceramic Society,** 37 (**2017**) 2235–2244.	**6.364**
44	Sourabh Paul, S Paul, **P P Bandyopadhyay,** Minimisation of specific cutting energy and radial thrust force in turning of AISI 1060 steel, accepted in the **Proceedings of the Institution of Mechanical Engineers, Part B:** Journal of Engineering Manufacture, vol. 233, 2: pp. 426-442. (**2017**) DOI: 10.1177/0954405416683431	**2.759**
43	S Jambagi, S Kar, P Brodard, **P P Bandyopadhyay*,** Characteristics of plasma sprayed coatings produced from carbon nanotube doped ceramic powder feedstock, **Materials and Design**, 112 (**2016**) 392–401	**9.417**
42	V Bolleddu, V Racherla and **P P Bandyopadhyay*,** Characterization of Air Plasma Sprayed Yttria Stabilized Zirconia Coatings deposited with Nitrogen, **Int J Adv Manuf. Technol.**, (**2017**) 90:3437–3449, 10.1007/s00170- 016-9613-1	**3.563**
41	S Kar, S Paul and **P.P. Bandyopadhyay***, Precision superabrasive grinding of plasma sprayed ceramic coatings, Ceramics International, 42 (**2016**) 19302– 19319.	**5.532**
40	S Kar, S Paul and **P.P. Bandyopadhyay***, Processing and characterisation of plasma sprayed oxides: Microstructure, phases and residual stress, **Surface and coating technology**, 304 (**2016**) 364–374.	**4.865**
39	S Hazra and **P P Bandyopadhyay*,** The effect of parametric variation on the mullite content of plasma sprayed zircon-alumina powder mixture, **Surface and Coatings Technology**, 302(**2016**)227-237	**4.865**

38	Purnendu Das, Soumitra Paul, **P.P. Bandyopadhyay*,** Preparation of diamond reinforced metal powders as thermal spray feedstock using ball milling, **Surface & Coatings Technology** 286 (**2016)** 165–171	**4.865**
37	V. Bolleddu, V. Racherla, **P.P. Bandyopadhyay***, Comparative study of air plasma sprayed and high velocity oxy-fuel sprayed nanostructured WC- 17wt%Co coatings, **Int J Adv Manuf. Technol**., 84(**2016**) 1601-1613.	**3.563**
36	S Hazra, J Das and **P P Bandyopadhyay***, Synthesis of mullite-based coatings from alumina and zircon powder mixtures by plasma spraying and laser remelting, accepted in **Mat. Chem and Phys** 154 (**2015**) 22-29.	**4.778**
35	S Jambagi, N Sarkar and **P P Bandyopdhyay*,** Preparation of carbon nanotube doped ceramic powders for plasma sprayingusing heterocoagulation method, **Journal of the European Ceramic Society** 35 **(2015)** 989–1000	**6.364**
34	V. Bolleddu, V. Racherla, **P.P. Bandyopadhyay***, Microstructural and tribological characterization of air plasma sprayed nanostructured alumina– titania coatings deposited with nitrogen and argon as primary plasma gases, **Material and Design**, 59 **(2014)** 252- 263.	**9.417**
33	V Bolleddu, V Racherla, **P P Bandyopadhyay***, Microstructural Characterization of Plasma Sprayed Conventional and Nanostructured Coatings with Nitrogen as Primary Plasma Gas, **Surface and Coating technology**, 235 **(2013)** 424- 432.	**4.865**
32	**Bandyopadhyay, P. P***., Chicot, D., Kumar, C. S, Decoopman, X., Lesage, J: Influence of sinking-in and piling-up on the mechanical properties determination by indentation: A case study on rolled and DMLS stainless steel, **Material Science and Engineering** A , 576 (**2013**) 126–133	**6.044**
31	MS Kaiser, S Datta, **P P Bandyopadhyay**, A Guha, A Roychowdhury, MK Banerjee, Effect of Grain Refinement Through Minor Additions of Scandium and Zirconium on the Machinability of Al–Mg Alloys, **Journal of The Institution of Engineers (India): Series D**, 5 (**2013**) 1-8	**-**
30	**P.P. Bandyopadhyay***, D. Chicot, B. Venkateshwarlu, V. Racherla, X. Decoopman, J. Lesage, Mechanical Properties of Conventional and Nanostructured Plasma Sprayed Alumina Coatings, **Mechanics of Materials** 53 (**2012**) 61-71.	**4.137**
29	M. Sebastiani, G. Bolelli, L. Lusvarghi, **P.P. Bandyopadhyay**, E. Bemporad, High Resolution Residual Stress Measurement on Amorphous and Crystalline Plasma Sprayed Single Splats, **Surface and Coatings Technology** 206 (**2012**) 4872–4880	**4.865**
28	Somak Datta, D.K. Pratihar and **P.P. Bandyopadhyay**, Modeling of Input Output Relationships for a Plasma Sprayed Coating Process Using Soft Computing Tools, **Applied Soft Computing** 12 (**2012**) 3356–3368	**8.263**
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