

# Atul Babbar

## List of Publications by Year in descending order

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36  
papers

543  
citations

759055

12  
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752573

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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	EXPERIMENTAL INVESTIGATION AND PARAMETRIC OPTIMIZATION OF NEUROSURGICAL BONE GRINDING UNDER BIO-MIMIC ENVIRONMENT. Surface Review and Letters, 2023, 30, .	0.5	7
2	Multi-objective optimization of magnetic abrasive finishing using grey relational analysis. Materials Today: Proceedings, 2022, 50, 570-575.	0.9	6
3	On investigations of 3D printed nylon 6 parts prepared by fused filament fabrication. Materials Today: Proceedings, 2022, 48, 1153-1156.	0.9	3
4	Machining of hard and brittle materials: A comprehensive review. Materials Today: Proceedings, 2022, 50, 1048-1052.	0.9	14
5	Potential Application of CEM43°C and Arrhenius Model in Neurosurgical Bone Grinding. Materials Forming, Machining and Tribology, 2022, , 145-158.	0.7	2
6	Finite element simulation and integration of CEM43°C and Arrhenius Models for ultrasonic-assisted skull bone grinding: A thermal dose model. Medical Engineering and Physics, 2021, 90, 9-22.	0.8	16
7	Histological evaluation of thermal damage to Osteocytes: A comparative study of conventional and ultrasonic-assisted bone grinding. Medical Engineering and Physics, 2021, 90, 1-8.	0.8	10
8	Comparative statement for diametric delamination in drilling of cortical bone with conventional and ultrasonic assisted drilling techniques. Journal of Orthopaedics, 2021, 25, 53-58.	0.6	12
9	Experimental analysis of wear and multi-shape burr loading during neurosurgical bone grinding. Journal of Materials Research and Technology, 2021, 12, 15-28.	2.6	16
10	Latest trend in building construction: three-dimensional printing. Journal of Physics: Conference Series, 2021, 1950, 012007.	0.3	2
11	Functionalized biomaterials for 3D printing: An overview of the literature. , 2021, , 87-107.		3
12	Experimental Investigation and Optimization of Electric Discharge Machining Process Parameters Using Grey-Fuzzy-Based Hybrid Techniques. Materials, 2021, 14, 5820.	1.3	17
13	Investigation of Functionally Graded Adherents on Failure of Socket Joint of FRP Composite Tubes. Materials, 2021, 14, 6365.	1.3	5
14	Influence of Cutting Force and Drilling Temperature on Glass Hole Surface Integrity During Rotary Ultrasonic Drilling. Lecture Notes in Mechanical Engineering, 2021, , 369-378.	0.3	3
15	In-situ simultaneous surface finishing using abrasive flow machining via novel fixture. Journal of Manufacturing Processes, 2020, 50, 266-278.	2.8	44
16	Preliminary investigations of rotary ultrasonic neurosurgical bone grinding using Grey-Taguchi optimization methodology. Grey Systems Theory and Application, 2020, 10, 479-493.	1.0	14
17	Magneto-Rheological Fluid Assisted Abrasive Nanofinishing of Î²-Phase Ti-Nb-Ta-Zr Alloy: Parametric Appraisal and Corrosion Analysis. Materials, 2020, 13, 5156.	1.3	18
18	Application of hybrid nature-inspired algorithm: Single and bi-objective constrained optimization of magnetic abrasive finishing process parameters. Journal of Materials Research and Technology, 2020, 9, 7961-7974.	2.6	34

#	ARTICLE	IF	CITATIONS
19	In vivo evaluation of machining forces, torque, and bone quality during skull bone grinding. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 626-638.	1.0	31
20	Thermo-mechanical aspects and temperature measurement techniques of bone grinding. Materials Today: Proceedings, 2020, 33, 1458-1462.	0.9	12
21	Potential applications of three-dimensional printing for anatomical simulations and surgical planning. Materials Today: Proceedings, 2020, 33, 1558-1561.	0.9	8
22	Biomaterials and Fabrication Methods of Scaffolds for Tissue Engineering Applications. Materials Horizons, 2020, , 167-186.	0.3	6
23	Fabrication of Microchannels using Conventional and Hybrid Machining Processes. , 2020, , 37-51.		6
24	A Trending Nonconventional Hybrid Finishing/Machining Process. , 2020, , 79-93.		5
25	A Review Study on Miniaturization. , 2020, , 111-131.		7
26	3D Bioprinting in Pharmaceuticals, Medicine, and Tissue Engineering Applications. , 2020, , 147-161.		12
27	Effect of Process Parameters on Cutting Forces and Osteonecrosis for Orthopedic Bone Drilling Applications. , 2020, , 93-108.		7
28	Fabrication and Machining Methods of Composites for Aerospace Applications. , 2020, , 109-124.		6
29	Enhancement of activated tungsten inert gas (A-TIG) welding using multi-component TiO <sub>2</sub> -SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> hybrid flux. Measurement: Journal of the International Measurement Confederation, 2019, 148, 106912.	2.5	35
30	Effect of post weld thermal aging (PWTA) sensitization on micro-hardness and corrosion behavior of AISI 304 weld joints. Journal of Physics: Conference Series, 2019, 1240, 012078.	0.3	10
31	Thermogenesis mitigation using ultrasonic actuation during bone grinding: a hybrid approach using CEM43A°C and Arrhenius model. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	26
32	Rotary ultrasonic milling of C/SiC composites fabricated using chemical vapor infiltration and needling technique. Materials Research Express, 2019, 6, 085607.	0.8	21
33	Neurosurgical Bone Grinding. , 2019, , 137-155.		14
34	Synthesis, characterization, and bioactivity investigation of biomimetic biodegradable PLA scaffold fabricated by fused filament fabrication process. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	71
35	Enhancement of surface roughness for brittle material during rotary ultrasonic machining. MATEC Web of Conferences, 2018, 249, 01006.	0.1	18
36	Regression Model and Optimization of Magnetic Abrasive Finishing of Flat Brass Plate. Indian Journal of Science and Technology, 2017, 10, 1-7.	0.5	22