

# Thomas Hc Childs

## List of Publications by Year in descending order

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Version: 2024-02-01

19  
papers

496  
citations

933447

10  
h-index

794594

19  
g-index

20  
all docs

20  
docs citations

20  
times ranked

490  
citing authors

#	ARTICLE	IF	CITATIONS
1	Friction modelling in metal cutting. <i>Wear</i> , 2006, 260, 310-318.	3.1	179
2	Ti6Al4V metal cutting chip formation experiments and modelling over a wide range of cutting speeds. <i>Journal of Materials Processing Technology</i> , 2018, 255, 898-913.	6.3	49
3	Finite element simulations of static and sliding contact between a human fingertip and textured surfaces. <i>Tribology International</i> , 2010, 43, 2308-2316.	5.9	48
4	Ductile shear failure damage modelling and predicting built-up edge in steel machining. <i>Journal of Materials Processing Technology</i> , 2013, 213, 1954-1969.	6.3	37
5	Surface energy, cutting edge radius and material flow stress size effects in continuous chip formation of metals. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2010, 3, 27-39.	4.5	35
6	Numerical experiments on the influence of material and other variables on plane strain continuous chip formation in metal machining. <i>International Journal of Mechanical Sciences</i> , 2006, 48, 307-322.	6.7	27
7	MACHINING OF CORTICAL BONE: SIMULATIONS OF CHIP FORMATION MECHANICS USING METAL MACHINING MODELS. <i>Machining Science and Technology</i> , 2011, 15, 206-230.	2.5	26
8	Modelling orthogonal machining of carbon steels. Part I: Strain hardening and yield delay effects. <i>International Journal of Mechanical Sciences</i> , 2009, 51, 402-411.	6.7	21
9	Towards simulating built-up-edge formation in the machining of steel. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2011, 4, 57-70.	4.5	17
10	SIMULATIONS AND EXPERIMENTS ON MACHINING CARBON AND LOW ALLOY STEELS AT RAKE FACE TEMPERATURES UP TO 1200°C. <i>Machining Science and Technology</i> , 2012, 16, 96-110.	2.5	12
11	Revisiting flow stress modelling for simulating chip formation of carbon and low alloy steels. <i>Procedia CIRP</i> , 2019, 82, 26-31.	1.9	10
12	A novel methodology to characterize tool-chip contact in metal cutting using partially restricted contact length tools. <i>CIRP Annals - Manufacturing Technology</i> , 2021, 70, 61-64.	3.6	10
13	Physical modelling with experimental validation of high ductility metal cutting chip formation illustrated by copper machining. <i>International Journal of Machine Tools and Manufacture</i> , 2022, 173, 103847.	13.4	8
14	THE EFFECT OF A YIELD DROP ON CHIP FORMATION OF SOFT CARBON STEELS. <i>Machining Science and Technology</i> , 2009, 13, 471-487.	2.5	5
15	Tool Temperatures and Wear in Micro-machining Cu-Ni Alloys with Diamond Tools: Models, Simulations and Experiments. <i>Procedia CIRP</i> , 2015, 31, 270-275.	1.9	5
16	Developments in Simulating Built up Edge Formation in Steel Machining. <i>Procedia CIRP</i> , 2012, 1, 78-83.	1.9	4
17	Shelling strategies to save time in a rapid tooling process. <i>Rapid Prototyping Journal</i> , 2003, 9, 79-87.	3.2	1
18	Comment on "The cutting of metals by plastic buckling" by Udupa <i>et al</i> .. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018, 474, 20180170.	2.1	1

#	ARTICLE	IF	CITATIONS
19	Surface topography irregularities generated by broaching. CIRP Annals - Manufacturing Technology, 2022, 71, 105-108.	3.6	1