Ahmet Kahraman

List of Publications by Year
in descending order

51	2,294	279701	330025
papers	citations	23 h-index	37 g-index

52	52	52	861
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Load sharing characteristics of planetary transmissions. Mechanism and Machine Theory, 1994, 29, 1151-1165.	2.7	272
2	A dynamic model to predict modulation sidebands of a planetary gear set having manufacturing errors. Journal of Sound and Vibration, 2010, 329, 371-393.	2.1	226
3	Effect of Internal Gear Flexibility on the Quasi-Static Behavior of a Planetary Gear Set. Journal of Mechanical Design, Transactions of the ASME, 2001, 123, 408-415.	1.7	160
4	Influence of Carrier and Gear Manufacturing Errors on the Static Load Sharing Behavior of Planetary Gear Sets. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2004, 47, 908-915.	0.3	154
5	Free torsional vibration characteristics of compound planetary gear sets. Mechanism and Machine Theory, 2001, 36, 953-971.	2.7	151
6	Interactions between nonlinear spur gear dynamics and surface wear. Journal of Sound and Vibration, 2007, 307, 662-679.	2.1	123
7	Prediction of Spur Gear Mechanical Power Losses Using a Transient Elastohydrodynamic Lubrication Model. Tribology Transactions, 2010, 53, 554-563.	1.1	117
8	A dynamic model of a double-helical planetary gear set. Mechanism and Machine Theory, 2013, 70, 157-174.	2.7	117
9	Multi-Objective Ease-Off Optimization of Hypoid Gears for Their Efficiency, Noise, and Durability Performances. Journal of Mechanical Design, Transactions of the ASME, 2011, 133, .	1.7	81
10	Internal Gear Strains and Load Sharing in Planetary Transmissions: Model and Experiments. Journal of Mechanical Design, Transactions of the ASME, 2008, 130, .	1.7	77
11	A micro-pitting model for spur gear contacts. International Journal of Fatigue, 2014, 59, 224-233.	2.8	67
12	Influence of Design Parameters on Mechanical Power Losses of Helical Gear Pairs. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2009, 3, 146-158.	0.3	60
13	Micro-pitting fatigue lives of lubricated point contacts: Experiments and model validation. International Journal of Fatigue, 2013, 48, 9-18.	2.8	56
14	A fatigue model for contacts under mixed elastohydrodynamic lubrication condition. International Journal of Fatigue, 2011, 33, 427-436.	2.8	55
15	Measurement of vibratory motions of gears supported by compliant shafts. Mechanical Systems and Signal Processing, 2012, 29, 391-403.	4.4	51
16	Influence of Tooth Profile Modification on Helical Gear Durability. Journal of Mechanical Design, Transactions of the ASME, 2002, 124, 501-510.	1.7	48
17	Static Load Sharing Characteristics of Transmission Planetary Gear Sets: Model and Experiment. , 0, , .		45
18	A Windage Power Loss Model for Spur Gear Pairs. Tribology Transactions, 2010, 53, 473-484.	1.1	45

#	Article	IF	Citations
19	An Experimental Investigation of the Efficiency of Planetary Gear Sets. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	1.7	43
20	A Method to Derive Friction and Rolling Power Loss Formulae for Mixed Elastohydrodynamic Lubrication. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2011, 5, 252-263.	0.3	37
21	Robust Optimization of Cylindrical Gear Tooth Surface Modifications Within Ranges of Torque and Misalignments. Journal of Mechanical Design, Transactions of the ASME, 2013, 135, .	1.7	31
22	A physics-based model to predict micro-pitting lives of lubricated point contacts. International Journal of Fatigue, 2013, 47, 205-215.	2.8	30
23	A rotating gear test methodology for evaluation of high-cycle tooth bending fatigue lives under fully reversed and fully released loading conditions. International Journal of Fatigue, 2020, 133, 105432.	2.8	30
24	A Deterministic Elastohydrodynamic Lubrication Model of High-Speed Rotorcraft Transmission Components. Tribology Transactions, 2002, 45, 556-562.	1.1	29
25	A Helical Gear Pair Pocketing Power Loss Model. Journal of Tribology, 2014, 136, .	1.0	23
26	A Gear Load Distribution Model for a Planetary Gear Set With a Flexible Ring Gear Having External Splines. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	1.7	23
27	An experimental and theoretical study of subharmonic resonances of a spur gear pair. Journal of Sound and Vibration, 2021, 515, 116421.	2.1	17
28	An experimental characterization of the friction coefficient of a wind turbine gearbox lubricant. Wind Energy, 2019, 22, 509-522.	1.9	13
29	Effects of Bearing Preload, Oil Volume, and Operating Temperature on Axle Power Losses. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	1.7	11
30	Experimental and Theoretical Investigation of Vibro-impact Motions of a Gear Pair Subjected to Torque Fluctuations to Define a Rattle Noise Severity Index. Journal of Vibration and Acoustics, Transactions of the ASME, 2022, 144, .	1.0	11
31	An Experimentalâ€“Theoretical Methodology to Develop Scuffing Limits for Relatively Smooth High-Speed Contacts. Tribology Transactions, 2020, 63, 781-795.	1.1	10
32	Aspects Regarding the Use of Probabilistic Models for Isothermal Full Film Rough Line Contacts. Tribology Transactions, 2004, 47, 386-395.	1.1	9
33	An Experimental Investigation of the Effect of Tooth Asymmetry and Tooth Root Shape on Root Stresses and Single Tooth Bending Fatigue Life of Gear Teeth. , 2011, , .		8
34	An assemblability check methodology for the kinematic configurations of automatic transmission planetary gear trains. Journal of Mechanical Science and Technology, 2016, 30, 5605-5616.	0.7	8
35	An Experimental Evaluation of High-Cycle Gear Tooth Bending Fatigue Lives Under Fully Reversed and Fully Released Loading Conditions With Application to Planetary Gear Sets. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	1.7	8
36	Characterization of Nonlinear Rattling Behavior of a Gear Pair Through a Validated Torsional Model. Journal of Computational and Nonlinear Dynamics, 2022, 17, .	0.7	7

#	Article	IF	Citations
37	Development of a High-Speed Two-Disc Tribometer for Evaluation of Traction and Scuffing of Lubricated Contacts. Tribology Transactions, 2020, 63, 509-518.	1.1	6
38	AÂcomparison of gear tooth bending fatigue lives from single tooth bending and rotating gear tests. Forschung Im Ingenieurwesen/Engineering Research, 0, , 1.	1.0	6
39	A Frictional Efficiency Loss Model for Helical Gears. , 2005, , .		5
40	An Experimental Investigation of the Influence of Manufacturing Errors on the Planetary Gear Stresses and Load Sharing. , 2007, , 149.		5
41	Dynamic Transmission Error Measurements From Spur Gear Pairs Having Tooth Indexing Errors. , 2017, , .		5
42	An experimental investigation of the load distribution of splined joints under gear loading conditions. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2017, 11, JAMDSM0084-JAMDSM0084.	0.3	3
43	Ã‰tude thÃ©orique et expÃ©rimentale du comportement non-linÃ©aire d'un engrenage droit induit par le jeu entre dents. Mecanique Et Industries, 2007, 8, 357-364.	0.2	2
44	Influence of Surface Roughness on Traction and Scuffing Performance of Lubricated Contacts for Aerospace and Automotive Gearing. , 2012, , .		2
45	Robust Optimization of Cylindrical Gear Tooth Surface Modifications Within Ranges of Torque and Misalignments. , 2013, , .		2
46	An Experimental Investigation of Churning Power Losses of a Gearbox. , 2017, , .		1
47	Modelling of steady-state mechanical power losses in planetary gear trains of automatic transmissions. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2017, 11, JAMDSM0080-JAMDSM0080.	0.3	1
48	Multi-Objective Ease-Off Optimization of Hypoid Gears for Their Efficiency, Noise and Durability Performances. , 2011, , .		0
49	Effects of Bearing Preload, Oil Volume and Operating Temperature on Axle Power Losses. , 2011, , .		0
50	A Helical Gear Pair Pocketing Power Loss Model. , 2013, , .		0
51	A Load Distribution Model for Planetary Gear Sets. , 2017, , .		0