

Slobodan I BabiÄ

List of Publications by Year in descending order

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899
citing authors

#	ARTICLE	IF	CITATIONS
1	Cylindrical Magnets and Coils: Fields, Forces, and Inductances. IEEE Transactions on Magnetics, 2010, 46, 3585-3590.	2.1	221
2	Mutual Inductance Calculation Between Circular Filaments Arbitrarily Positioned in Space: Alternative to Grover's Formula. IEEE Transactions on Magnetics, 2010, 46, 3591-3600.	2.1	158
3	Calculating Mutual Inductance Between Circular Coils With Inclined Axes in Air. IEEE Transactions on Magnetics, 2008, 44, 1743-1750.	2.1	146
4	New Analytic-Numerical Solutions for the Mutual Inductance of Two Coaxial Circular Coils With Rectangular Cross Section in Air. IEEE Transactions on Magnetics, 2006, 42, 1661-1669.	2.1	123
5	Improvement in calculation of the self- and mutual inductance of thin-wall solenoids and disk coils. IEEE Transactions on Magnetics, 2000, 36, 1970-1975.	2.1	118
6	Magnetic Force Calculation Between Thin Coaxial Circular Coils in Air. IEEE Transactions on Magnetics, 2008, 44, 445-452.	2.1	93
7	MUTUAL INDUCTANCE CALCULATION FOR NON-COAXIAL CIRCULAR AIR COILS WITH PARALLEL AXES. Progress in Electromagnetics Research, 2009, 91, 287-301.	4.4	91
8	The Mutual Inductance of Two Thin Coaxial Disk Coils in Air. IEEE Transactions on Magnetics, 2004, 40, 822-825.	2.1	74
9	New Formulas for Mutual Inductance and Axial Magnetic Force Between a Thin Wall Solenoid and a Thick Circular Coil of Rectangular Cross-Section. IEEE Transactions on Magnetics, 2011, 47, 2034-2044.	2.1	67
10	VALIDITY CHECK OF MUTUAL INDUCTANCE FORMULAS FOR CIRCULAR FILAMENTS WITH LATERAL AND ANGULAR MISALIGNMENTS. Progress in Electromagnetics Research M, 2009, 8, 15-26.	0.9	64
11	MUTUAL INDUCTANCE AND FORCE EXERTED BETWEEN THICK COILS. Progress in Electromagnetics Research, 2010, 102, 367-380.	4.4	62
12	New procedures for calculating the mutual inductance of the system: filamentary circular coil-massive circular solenoid. IEEE Transactions on Magnetics, 2003, 39, 1131-1134.	2.1	43
13	New Formulas for Mutual Inductance and Axial Magnetic Force Between Magnetically Coupled Coils: Thick Circular Coil of the Rectangular Cross-Section-Thin Disk Coil (Pancake). IEEE Transactions on Magnetics, 2013, 49, 860-868.	2.1	37
14	New Mutual Inductance Calculation of the Magnetically Coupled Coils: Thin Disk Coil-Thin Wall Solenoid. Journal of Electromagnetic Waves and Applications, 2006, 20, 1281-1290.	1.6	25
15	Calculation improvement of 3D linear magnetostatic field based on fictitious magnetic surface charge. IEEE Transactions on Magnetics, 2000, 36, 3125-3127.	2.1	21
16	An improvement in the calculation of the magnetic field for an arbitrary geometry coil with rectangular cross section. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2005, 18, 493-504.	1.9	21
17	Magnetic Force Between Inclined Circular Filaments Placed in Any Desired Position. IEEE Transactions on Magnetics, 2012, 48, 69-80.	2.1	20
18	On Evaluation of Inductance, DC Resistance, and Capacitance of Coaxial Inductors at Low Frequencies. IEEE Transactions on Magnetics, 2014, 50, 1-12.	2.1	20

#	ARTICLE	IF	CITATIONS
19	Mutual inductance and magnetic force calculations for coaxial bitter disk coils (Pancakes). IET Science, Measurement and Technology, 2016, 10, 972-976.	1.6	17
20	MAGNETIC FORCE CALCULATION BETWEEN CIRCULAR COILS OF RECTANGULAR CROSS SECTION WITH PARALLEL AXES FOR SUPERCONDUCTING MAGNET. Progress in Electromagnetics Research B, 2012, 37, 275-288.	1.0	15
21	Fast Numerical Computation of Current Distribution and AC Losses in Helically Wound Thin Tape Conductors: Single-Layer Coaxial Arrangement. IEEE Transactions on Applied Superconductivity, 2010, 20, 2381-2389.	1.7	13
22	MAGNETIC FORCE BETWEEN INCLINED CIRCULAR LOOPS (LORENTZ APPROACH). Progress in Electromagnetics Research B, 2012, 38, 333-349.	1.0	13
23	Calculation of mutual inductance and magnetic force between two thick coaxial Bitter coils of rectangular cross section. IET Electric Power Applications, 2017, 11, 441-446.	1.8	13
24	Mutual inductance and magnetic force calculations between thick bitter circular coil of rectangular cross section with inverse radial current and filamentary circular coil with constant azimuthal current. IET Electric Power Applications, 2017, 11, 1596-1600.	1.8	12
25	Torque calculation between circular coils with inclined axes in air. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2011, 24, 230-243.	1.9	9
26	A new formula for calculating the magnetic force between two coaxial thick circular coils with rectangular cross-section. Journal of Electromagnetic Waves and Applications, 2015, 29, 1181-1193.	1.6	9
27	CALCULATION OF THE MUTUAL INDUCTANCE AND THE MAGNETIC FORCE BETWEEN A THICK CIRCULAR COIL OF THE RECTANGULAR CROSS SECTION AND A THIN WALL SOLENOID (INTEGRO-DIFFERENTIAL APPROACH). Progress in Electromagnetics Research B, 2011, 33, 221-237.	1.0	8
28	MUTUAL INDUCTANCE CALCULATION BETWEEN MISALIGNMENT COILS FOR WIRELESS POWER TRANSFER OF ENERGY. Progress in Electromagnetics Research M, 2014, 38, 91-102.	0.9	8
29	Calculation of some electromagnetic quantities for circular thick coil of rectangular cross-section and pancake with inverse radial currents. IET Electric Power Applications, 2018, 12, 1306-1310.	1.8	6
30	A new numerical approach to find current distribution and AC losses in coaxial assembly of twisted HTS tapes in single layer arrangement. Journal of Physics: Conference Series, 2010, 234, 022034.	0.4	4
31	Correction to "New Formulas for Mutual Inductance and Axial Magnetic Force between a Thin Wall Solenoid and a Thick Circular Coil of Rectangular Cross-Section" [Aug 11 2034-2044]. IEEE Transactions on Magnetics, 2012, 48, 2096-2096.	2.1	3
32	Mutual Inductance and Magnetic Force Calculations for Bitter Disk Coil (Pancake) with Nonlinear Radial Current and Filamentary Circular Coil with Azimuthal Current. Advances in Electrical Engineering, 2016, 2016, 1-6.	1.1	3
33	NEW FORMULAS FOR CALCULATING TORQUE BETWEEN FILAMENTARY CIRCULAR COIL AND THIN WALL SOLENOID WITH INCLINED AXIS WHOSE AXES ARE AT THE SAME PLANE. Progress in Electromagnetics Research M, 2018, 73, 141-151.	0.9	3
34	Self-Inductance of the Circular Coils of the Rectangular Cross-Section with the Radial and Azimuthal Current Densities. Physics, 2020, 2, 352-367.	1.4	3
35	Vector Potential, Magnetic Field, Mutual Inductance, Magnetic Force, Torque and Stiffness Calculation between Current-Carrying Arc Segments with Inclined Axes in Air. Physics, 2021, 3, 1054-1087.	1.4	3
36	THE MAGNETIC FIELD PRODUCED FROM A CONICAL CURRENT SHEET AND FROM A THIN AND TIGHTLY-WOUND CONICAL COIL. Progress in Electromagnetics Research B, 2021, 90, 1-20.	1.0	2

#	ARTICLE	IF	CITATIONS
37	Analytical and Semi-Analytical Formulas for the Self and Mutual Inductances of Concentric Coplanar Ordinary and Bitter Disk Coils. <i>Physics</i> , 2021, 3, 240-254.	1.4	2
38	INTRODUCING FICTITIOUS CURRENTS FOR CALCULATING ANALYTICALLY THE ELECTRIC FIELD IN CYLINDRICAL CAPACITORS. <i>Progress in Electromagnetics Research M</i> , 2009, 9, 139-150.	0.9	1
39	Integration of Mobile Backhaul and Broadband Fixed Access Networks in Urban Metropolitan Areas. <i>Fiber and Integrated Optics</i> , 2013, 32, 105-116.	2.5	1
40	An improvement in the approximation of basic curve $\hat{I}_{1/4}=\hat{I}_{1/4}(h)$ using spline functions. , 1998, , .		0
41	New closed form expressions for calculating the magnetic field of thin conductors with longitudinal current direction introduction. , 2000, , .		0
42	Choice of segments in the $B=B(H)$ approximation using spline functions. , 2000, , .		0
43	Clock recovery where GPON is used as a Mobile back-haul. , 2012, , .		0
44	Addendum: Babic, S., et al. Self-Inductance of the Circular Coils of the Rectangular Cross-Section with the Radial and Azimuthal Current Densities. <i>Physics</i> 2020, 2, 352â€“367. <i>Physics</i> , 2021, 3, 1-5.	1.4	0