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Disciplineⁱ Control, electronic and electrical engineering

Bibliometric indicators

1.	Number of journal publications in WoS/ Scopus	69/75
2.	Citations (WoS/Scopus) excluding self-citations	832/1149
3.	Hirsch index (WoS/Scopus)	18/21
4.	Hirsch index in Google Scholar	25
5.	Citations in Google Scholar	1809

1. The number of PhD students who have graduated under your supervision: 1

2. The number of PhD students currently supervised: 1

3. Are you currently accepting new PhD students:

a. Polish Yes

b. Foreign Yes

PhD Advisor form

Research interests or topics offered for PhD research (no more than 2000 characters)ⁱ (Please fill in here)

1. **Modelling of electromagnetic field distributions in living organisms**
 Evaluation of the influences of electric, magnetic and electromagnetic fields on living organisms is now, one of the most important interdisciplinary scientific challenges of the twenty-first century. The objective of the thesis is modelling of field distributions in living organisms, including their structures as well as characteristics.
2. **Piezoelectric periodic structures**
 Piezoelectric elements are widely used as active components in systems generating energy from vibrations. The combination of the characteristics of the piezo as well as periodic systems can be explored mutually as the influence on the efficiency of the process of energy harvesting depending on the characteristics of the piezoelectric/periodic systems. The work can be both experimental and modelling – modelling by the Finite Element Method.
3. **Analysis of treeing of dielectric materials**
 Partial discharges present a serious threat to the safe operation of insulation dielectric materials. The adverse effect of partial discharges is a gradual loss of insulating properties leading, in extreme cases, to a complete insulation breakdown and short circuits or malfunction. The thesis can be both experimental and modelling – modelling using the Finite Element Method.

Funding or special equipment needed to carry out a PhD project ⁱⁱⁱ:

1. Is funding available for experimental work: not needed
2. Is the equipment needed to complete a PhD project available in your lab/department: Yes

Most recent publications in WoS/SCOPUS journal – no more than 5 published after 1.01.2017

No	Authors/title/journal	Journal IF/Quartile – for WoS and SNIP/ CiteScore for SCOPUS	Publication year

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1.	A. Żak, M. Krawczuk: A higher order transversely deformable shell-type spectral finite element for dynamic analysis of isotropic structures, <i>Finite Elements in Analysis and Design</i> , 142, 17–29	2.253/Q1-Q2/3.04	2018
2.	Ł. Doliński, M. Krawczuk, A. Żak: Detection of delamination in laminate wind turbine blades using one-dimensional wavelet analysis of modal responses, <i>Shock and Vibration</i>	1.857/Q2/1.60	2018
3.	A. Żak, M. Krawczuk, M. Palacz, Ł. Doliński, W. Waszkowiak: High frequency dynamics of an isotropic Timoshenko periodic beam by the use of the Time-domain Spectral Finite Element Method, <i>Journal of Sound and Vibration</i> , 409, 318–335	2.618/Q2-Q1-Q1/3.20	2017
4.	A. Żak, M. Krawczuk, G. Redlarski, W. Waszkowiak: Modelling of high frequency dynamic responses of engineering structures, 14th Conference on Dynamical Systems: Theory and Applications, 611–622	n.a./n.a./n.a	2017

Most recent externally funded projects you were involved in – no more than 3

No	Project title, the name of the Principal Investigator (PI) and the institution the project was carried out	Year awarded	Role in the project
1.	PROM Programme – International exchange of scholarships for doctoral students and academic staff, Gdańsk University of Technology	2018	PI/co-PI/R
2.	Propagation of elastic waves in periodic structures, Gdańsk University of Technology	2012	PI/ <u>co-PI</u> /R
3.	Structural health monitoring system based on the propagation analysis of Lamb waves, Institute of Fluid-flow Machinery, Polish Academy of Sciences	2010	PI/ <u>co-PI</u> /R

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Additional relevant information – (no more than 1600 characters)^{iv} (Please fill in here)

ⁱ You may select up to two disciplines out of 12 disciplines represented in the Doctoral School

ⁱⁱ Observe the limit of not more than 300 words ⁱⁱⁱ Leave only one answer

^{iv} Add any other relevant information eg. awards for PHD students whom you supervised (no more than 200 words)