

# Petr Lukeš

## List of Publications by Year in descending order

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72  
papers

2,958  
citations

218677

26  
h-index

175258

52  
g-index

77  
all docs

77  
docs citations

77  
times ranked

3726  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Formation of ROS and RNS in Water Electro-Sprayed through Transient Spark Discharge in Air and their Bactericidal Effects. <i>Plasma Processes and Polymers</i> , 2013, 10, 649-659.                               | 3.0  | 284       |
| 2  | Generation of ozone by pulsed corona discharge over water surface in hybrid gas-liquid electrical discharge reactor. <i>Journal Physics D: Applied Physics</i> , 2005, 38, 409-416.                                | 2.8  | 179       |
| 3  | Plasmachemical oxidation processes in a hybrid gas-liquid electrical discharge reactor. <i>Journal Physics D: Applied Physics</i> , 2005, 38, 4074-4081.   | 2.8  | 177       |
| 4  | Ultraviolet radiation from the pulsed corona discharge in water. <i>Plasma Sources Science and Technology</i> , 2008, 17, 024012.  | 3.1  | 171       |
| 5  | Retrieval of spruce leaf chlorophyll content from airborne image data using continuum removal and radiative transfer. <i>Remote Sensing of Environment</i> , 2013, 131, 85-102.                                    | 11.0 | 144       |
| 6  | Membrane damage and active but nonculturable state in liquid cultures of <i>Escherichia coli</i> treated with an atmospheric pressure plasma jet. <i>Bioelectrochemistry</i> , 2015, 103, 7-14.                    | 4.6  | 138       |
| 7  | Degradation of Substituted Phenols in a Hybrid Gas-Liquid Electrical Discharge Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 2921-2930.  | 3.7  | 134       |
| 8  | Optical properties of leaves and needles for boreal tree species in Europe. <i>Remote Sensing Letters</i> , 2013, 4, 667-676.  | 1.4  | 114       |
| 9  | Potential of pulsed corona discharges generated in water for the degradation of persistent pharmaceutical residues. <i>Water Research</i> , 2015, 84, 127-135.   | 11.3 | 108       |
| 10 | Atmospheric plasma generates oxygen atoms as oxidizing species in aqueous solutions. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 404002.   | 2.8  | 100       |
| 11 | Spectral Properties of Coniferous Forests: A Review of In Situ and Laboratory Measurements. <i>Remote Sensing</i> , 2018, 10, 207.   | 4.0  | 86        |
| 12 | Pulsed Electrical Discharge in Water Generated Using Porous-Ceramic-Coated Electrodes. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 1146-1147.   | 1.3  | 66        |
| 13 | Specificity of detection methods of nitrites and ozone in aqueous solutions activated by air plasma. <i>Plasma Processes and Polymers</i> , 2018, 15, 1800030.   | 3.0  | 65        |
| 14 | Relationship between forest density and albedo in the boreal zone. <i>Ecological Modelling</i> , 2013, 261-262, 74-79.   | 2.5  | 54        |
| 15 | Fluorescence measurements of peroxynitrite/peroxynitrous acid in cold air plasma treated aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 8883-8896.                                      | 2.8  | 51        |
| 16 | The Role of Narrow Band Imaging in the Detection of Recurrent Laryngeal and Hypopharyngeal Cancer after Curative Radiotherapy. <i>BioMed Research International</i> , 2014, 2014, 1-9.                             | 1.9  | 50        |
| 17 | Ecological applications of physically based remote sensing methods. <i>Scandinavian Journal of Forest Research</i> , 2010, 25, 325-339.  | 1.4  | 43        |
| 18 | Surface Charge at the Oxide/Electrolyte Interface: Toward Optimization of Electrolyte Composition for Treatment of Aluminum and Magnesium by Plasma Electrolytic Oxidation. <i>Langmuir</i> , 2016, 32, 1405-1409. | 3.5  | 42        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Formation of reactive chlorine species in saline solution treated by non-equilibrium atmospheric pressure He/O <sub>2</sub> plasma jet. <i>Plasma Sources Science and Technology</i> , 2019, 28, 035015.   | 3.1  | 42        |
| 20 | The Role of NBI HDTV Magnifying Endoscopy in the Prehistologic Diagnosis of Laryngeal Papillomatosis and Spinocellular Cancer. <i>BioMed Research International</i> , 2014, 2014, 1-7.   | 1.9  | 41        |
| 21 | Discharge Filamentary Patterns Produced by Pulsed Corona Discharge at the Interface Between a Water Surface and Air. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2644-2645.   | 1.3  | 31        |
| 22 | The Role of Surface Chemistry at Ceramic/Electrolyte Interfaces in the Generation of Pulsed Corona Discharges in Water Using Porous Ceramic-Coated Rod Electrodes. <i>Plasma Processes and Polymers</i> , 2009, 6, 719-728.                          | 3.0  | 30        |
| 23 | A new approach for simulating forest albedo based on spectral invariants. <i>Remote Sensing of Environment</i> , 2013, 137, 12-16.   | 11.0 | 30        |
| 24 | Luminous phase of nanosecond discharge in deionized water: morphology, propagation velocity and optical emission. <i>Plasma Sources Science and Technology</i> , 2017, 26, 07LT01.   | 3.1  | 30        |
| 25 | An assessment of ground reference methods for estimating LAI of boreal forests. <i>Forest Ecology and Management</i> , 2013, 292, 10-18.   | 3.2  | 29        |
| 26 | The catalytic role of tungsten electrode material in the plasmachemical activity of a pulsed corona discharge in water. <i>Plasma Sources Science and Technology</i> , 2011, 20, 034011.   | 3.1  | 28        |
| 27 | Geographical gradients in boreal forest albedo and structure in Finland. <i>Remote Sensing of Environment</i> , 2014, 152, 526-535.  | 11.0 | 28        |
| 28 | Measured and modelled albedos in Finnish boreal forest stands of different species, structure and understory. <i>Ecological Modelling</i> , 2014, 284, 10-18.  | 2.5  | 26        |
| 29 | Spectral contribution of understory to forest reflectance in a boreal site: an analysis of EO-1 Hyperion data. <i>Remote Sensing of Environment</i> , 2015, 171, 98-104.   | 11.0 | 26        |
| 30 | Fenton chemistry promoted by sub-microsecond pulsed corona plasmas for organic micropollutant degradation in water. <i>Electrochimica Acta</i> , 2017, 245, 539-548.   | 5.2  | 23        |
| 31 | Spectroscopic characteristics of H <sub>1±</sub> /O <sup>1</sup> atomic lines generated by nanosecond pulsed corona-like discharge in deionized water. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 124001.                                 | 2.8  | 23        |
| 32 | Comparison of Reflectance Measurements Acquired with a Contact Probe and an Integration Sphere: Implications for the Spectral Properties of Vegetation at a Leaf Level. <i>Sensors</i> , 2016, 16, 1801.   | 3.8  | 22        |
| 33 | Emission spectra of a pulse needle-to-plane corona-like discharge in conductive aqueous solutions. <i>Plasma Sources Science and Technology</i> , 2012, 21, 055031.  | 3.1  | 21        |
| 34 | Presence of different genotypes of <i>Helicobacter pylori</i> in patients with chronic tonsillitis and sleep apnoea syndrome. <i>European Archives of Oto-Rhino-Laryngology</i> , 2014, 271, 607-613.  | 1.6  | 21        |
| 35 | Measurement methods and variability assessment of the Norway spruce total leaf area: implications for remote sensing. <i>Trees - Structure and Function</i> , 2013, 27, 111-121.   | 1.9  | 20        |
| 36 | Pilot study: Association between <i>Helicobacter pylori</i> in adenoid hyperplasia and reflux episodes detected by multiple intraluminal impedance in children. <i>International Journal of Pediatric Otorhinolaryngology</i> , 2014, 78, 1243-1249. | 1.0  | 20        |

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|----|---|------|-----------|
| 37 | Characteristics of meter-scale surface electrical discharge propagating along water surface at atmospheric pressure. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 415202.  | 2.8  | 19        |
| 38 | Thyroid carcinoma surgery in children and adolescents – 15 years experience surgery of pediatric thyroid carcinoma. <i>International Journal of Pediatric Otorhinolaryngology</i> , 2014, 78, 990-994.                          | 1.0  | 18        |
| 39 | Estimation of Spruce Needle-Leaf Chlorophyll Content Based on DART and PARAS Canopy Reflectance Models. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 1534-1544.           | 4.9  | 17        |
| 40 | Multidecadal analysis of forest growth and albedo in boreal Finland. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016, 52, 296-305.  | 2.8  | 17        |
| 41 | Detection of <i>Helicobacter pylori</i> in oropharyngeal lymphatic tissue with real-time PCR and assessment of its carcinogenic potential. <i>European Archives of Oto-Rhino-Laryngology</i> , 2014, 271, 399-405.              | 1.6  | 16        |
| 42 | Comparison of <i>Helicobacter Pylori</i> Genotypes Obtained from the Oropharynx and Stomach of the Same Individuals – A Pilot Study. <i>Prague Medical Report</i> , 2012, 113, 231-239.   | 0.8  | 16        |
| 43 | Proton pencil-beam scanning radiotherapy in the treatment of nasopharyngeal cancer: dosimetric parameters and 2-year results. <i>European Archives of Oto-Rhino-Laryngology</i> , 2021, 278, 763-769.                           | 1.6  | 15        |
| 44 | <i>Helicobacter pylori</i> isolated from patients with tonsillar cancer or tonsillitis chronica could be of different genotype compared to isolates from gastrointestinal tract. <i>Folia Microbiologica</i> , 2007, 52, 91-94. | 2.3  | 14        |
| 45 | Competitive reactions in $Cl^+$ solutions treated by plasma-supplied O atoms. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 505206.   | 2.8  | 14        |
| 46 | In vivo effects of focused shock waves on tumor tissue visualized by fluorescence staining techniques. <i>Bioelectrochemistry</i> , 2015, 103, 103-110.   | 4.6  | 13        |
| 47 | Seasonality of albedo and FAPAR in a boreal forest. <i>Agricultural and Forest Meteorology</i> , 2017, 247, 331-342.  | 4.8  | 12        |
| 48 | Velocity of initial propagation of positive nanosecond discharge in liquid water: dependence on high voltage amplitude and water conductivity. <i>Plasma Sources Science and Technology</i> , 2019, 28, 02LT02.                 | 3.1  | 12        |
| 49 | Upscaling seasonal phenological course of leaf dorsiventral reflectance in radiative transfer model. <i>Remote Sensing of Environment</i> , 2020, 246, 111862.  | 11.0 | 12        |
| 50 | Stress response of <i>Escherichia coli</i> induced by surface streamer discharge in humid air. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 075401.  | 2.8  | 11        |
| 51 | Molecular dynamics simulations of singlet oxygen atoms reactions with water leading to hydrogen peroxide. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 275204.   | 2.8  | 11        |
| 52 | Minimally Invasive Video-Assisted versus Minimally Invasive Nonendoscopic Thyroidectomy. <i>BioMed Research International</i> , 2014, 2014, 1-7.  | 1.9  | 9         |
| 53 | Penetration of Gas Discharge Through the Gas-Liquid Interface Into the Bulk Volume of Conductive Aqueous Solution. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 3868-3875.  | 1.3  | 9         |
| 54 | Empirical test of the spectral invariants theory using imaging spectroscopy data from a coniferous forest. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2011, 13, 668-675.                    | 2.8  | 7         |

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|----|---|-----|-----------|
| 55 | Efficacy of Transnasal Flexible Videoendoscopy With Narrow Band Imaging for Follow-up of Patients After Transoral Laser Cordectomy. <i>Lasers in Surgery and Medicine</i> , 2020, 52, 333-340.                  | 2.1 | 7         |
| 56 | Outcomes After Human Papillomavirus Vaccination in Patients With Recurrent Respiratory Papillomatosis. <i>JAMA Otolaryngology - Head and Neck Surgery</i> , 2022, 148, 654.                                     | 2.2 | 7         |
| 57 | Filamentation of diamond nanoparticles treated in underwater corona discharge. <i>RSC Advances</i> , 2016, 6, 2352-2360.  | 3.6 | 6         |
| 58 | Zenker's Diverticulum: Carbon Dioxide Laser Endoscopic Surgery. <i>BioMed Research International</i> , 2014, 2014, 1-5.   | 1.9 | 5         |
| 59 | Leucine modifications by He/O <sub>2</sub> plasma treatment in phosphate-buffered saline: bactericidal effects and chemical characterization. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 505206.     | 2.8 | 4         |
| 60 | Generation of Focused Shock Waves in Water for Biomedical Applications. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2012, , 403-416.   | 0.5 | 3         |
| 61 | Pressure Field Around Underwater Negative Streamers. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 1787-1792.  | 1.3 | 3         |
| 62 | Gas-liquid interface influencing electronic structure of phenol based on molecular dynamics simulations and theoretical X-ray absorption spectroscopy. <i>Journal of Molecular Liquids</i> , 2021, 341, 117378. | 4.9 | 3         |
| 63 | <i>Helicobacter pylori</i> – Not Only a Gastric Pathogene?. , 2011, , .   |     | 2         |
| 64 | Special Electromagnetic Agents: From Cold Plasma to Pulsed Electromagnetic Radiation. , 2017, , 109-154.  |     | 2         |
| 65 | Treatment of phenylalanine and tyrosine in phosphate-buffered saline by plasma-supplied oxygen atoms: Chemical characterization and bactericidal effects. <i>Plasma Processes and Polymers</i> , 2022, 19, .    | 3.0 | 2         |
| 66 | Bulk-phase chemistry induced by nanosecond discharge plasma in water. , 2017, , .   |     | 1         |
| 67 | Aging of Al thin film extreme ultraviolet filters. , 2019, , .  |     | 1         |
| 68 | Estimating canopy spectral invariants from ground reference and remote sensing data. , 2010, , .  |     | 0         |
| 69 | Electrical breakdown of water using porous ceramic-coated electrode. , 2011, , .  |     | 0         |
| 70 | Degradation of selected pharmaceuticals with pulsed corona discharges generated in water. , 2014, , .   |     | 0         |
| 71 | Study of nanosecond pulsed corona-like discharge in deionized water by optical methods. , 2017, , .   |     | 0         |
| 72 | Neck Dissection for Thyroid Cancer. , 2009, , 45-54.  |     | 0         |