# Anthony B Murphy

List of Publications by Year
in descending order

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|---|---|---|---|
| 299 papers | 13,843 citations | 28242 55 h-index | 26591 107 g-index |
| 301 all docs | 301 docs citations | 301 times ranked | 9910 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Sustainable Ammonia Synthesis from Nitrogen and Water by Oneâ€Step Plasma Catalysis. Energy and Environmental Materials, 2023, 6, . | 7.3 | 20 |
| 2 | Detonation of a nitromethane-based energetic mixture driven by electrical wire explosion. Journal Physics D: Applied Physics, 2022, 55, 05LT01. | 1.3 | 16 |
| 3 | Influence of Groove on Metal Vapour Behavior and Arc Characteristics in TIG Welding of High Manganese Stainless Steels. Plasma Chemistry and Plasma Processing, 2022, 42, 229-245. | 1.1 | 1 |
| 4 | Pulsed Townsend measurement of electron swarm parameters in C4F7Nâ€“CO2 and C4F7Nâ€“N2 mixtures as eco-friendly insulation gas. Journal of Applied Physics, 2022, 131, . | 1.1 | 13 |
| 5 | Numerical Analysis of Metal Transfer Process in Plasma MIG Welding. Metals, 2022, 12, 326. | 1.0 | 5 |
| 6 | Foundations of plasma catalysis for environmental applications. Plasma Sources Science and Technology, 2022, 31, 053002. | 1.3 | 28 |
| 7 | Altering the Supply of Shielding Gases to Fabricate Distinct Geometry in GMA Additive Manufacturing. Applied Sciences (Switzerland), 2022, 12, 3679. | 1.3 | 8 |
| 8 | Modeling of argonâ€“steam thermal plasma flow for abatement of fluorinated compounds. Journal Physics D: Applied Physics, 2022, 55, 375201. | 1.3 | 4 |
| 9 | Experimental study on the effect of argon shielding gas on the suppression of nitrogen arc anode ablation. Journal Physics D: Applied Physics, 2022, 55, 375202. | 1.3 | 1 |
| 10 | The 2022 Plasma Roadmap: low temperature plasma science and technology. Journal Physics D: Applied Physics, 2022, 55, 373001. | 1.3 | 139 |
| 11 | Macrosegregation in the Weld Pool in Metal Inert-Gas Welding of Aluminium. Journal of Manufacturing Processes, 2021, 61, 111-127. | 2.8 | 5 |
| 12 | Application of Plasma-Printed Paper-Based SERS Substrate for Cocaine Detection. Sensors, 2021, 21, 810. | 2.1 | 23 |
| 13 | Toward a theory of ball lightning occurring in houses and aircraft. Journal of Atmospheric and Solar-Terrestrial Physics, 2021, 214, 105532. | 0.6 | 6 |
| 14 | Effect of dilution gas composition on the evolution of graphite electrode characteristics in the spark gap switch. Plasma Science and Technology, 2021, 23, 064009. | 0.7 | 4 |
| 15 | Numerical Investigation of Heat Transfer During Submerged Arc Welding Phenomena by Coupled DEM-ISPH Simulation. International Journal of Heat and Mass Transfer, 2021, 171, 121062. | 2.5 | 19 |
| 16 | The case for digital twins in metal additive manufacturing. JPhys Materials, 2021, 4, 040401. | 1.8 | 33 |
| 17 | Dominant Heat Transfer Mechanisms in the GTAW Plasma Arc Column. Plasma Chemistry and Plasma Processing, 2021, 41, 1497-1515. | 1.1 | 8 |
| 18 | A novel anode structure for diffuse arc anode attachment. Journal Physics D: Applied Physics, 2021, 54, 36LT01. | 1.3 | 5 |

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|---|---|---|---|
| 19 | Electrical wire explosion as a source of underwater shock waves. Journal Physics D: Applied Physics, 2021, 54, 403001. | 1.3 | 24 |
| 20 | Effects of alkaline elements on the metal transfer behavior in metal cored arc welding. Journal of Manufacturing Processes, 2021, 68, 1448-1457. | 2.8 | 5 |
| 21 | Arc dynamics in a vortex-stabilized non-transferred plasma torch with a tangential gas feed. Journal Physics D: Applied Physics, 2021, 54, 495501. | 1.3 | 1 |
| 22 | Multiscale simulation of rapid solidification of an aluminiumâ€“silicon alloy under additive manufacturing conditions. Additive Manufacturing, 2021, 48, 102353. | 1.7 | 5 |
| 23 | Towards developing multiscale-multiphysics models and their surrogates for digital twins of metal additive manufacturing. Additive Manufacturing, 2021, 46, 102089. | 1.7 | 34 |
| 24 | Low-pressure plasma-induced physical vapor deposition of advanced thermal barrier coatings: Microstructures, modelling and mechanisms. Materials Today Physics, 2021, 21, 100481. | 2.9 | 18 |
| 25 | Modelling and measurements of gas tungsten arc welding in argonâ€“helium mixtures with metal vapour. Welding in the World, Le Soudage Dans Le Monde, 2021, 65, 767-783. | 1.3 | 12 |
| 26 | Temperature-independent, nonoxidative methane conversion in nanosecond repetitively pulsed DBD plasma. Sustainable Energy and Fuels, 2021, 5, 787-800. | 2.5 | 24 |
| 27 | Generalized representation of arc shape, arc column characteristics and arc-weld pool interactions for DC electric arcs burning in monoatomic gases. Journal Physics D: Applied Physics, 2021, 54, 055001. | 1.3 | 3 |
| 28 | Temporal evolution of electron energy distribution function and its correlation with hydrogen radical generation in atmospheric-pressure methane needleâ€“plane discharge plasmas. Journal Physics D: Applied Physics, 2021, 54, 095202. | 1.3 | 12 |
| 29 | Numerical investigation for dominant factors in slag transfer and deposition process during metal active gas welding using incompressible smoothed particle hydrodynamics method. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2021, 39, 277-290. | 0.1 | 1 |
| 30 | Chemical Non-equilibrium Simulation of Anode Attachment of an Argon Transferred Arc. Plasma Chemistry and Plasma Processing, 2020, 40, 261-282. | 1.1 | 16 |
| 31 | Simulation of melt pool behaviour during additive manufacturing: Underlying physics and progress. Additive Manufacturing, 2020, 31, 100909. | 1.7 | 66 |
| 32 | Numerical study of the metal vapour transport in tungsten inert-gas welding in argon for stainless steel. Applied Mathematical Modelling, 2020, 79, 713-728. | 2.2 | 20 |
| 33 | Model-based parameter optimization for arc welding process simulation. Applied Mathematical Modelling, 2020, 81, 386-400. | 2.2 | 21 |
| 34 | Thermal decomposition characteristics and kinetic analysis of C<sub>4</sub>F<sub>7</sub>N/CO<sub>2</sub> gas mixture. Journal Physics D: Applied Physics, 2020, 53, 055502. | 1.3 | 19 |
| 35 | Calculation of two-temperature plasma composition: II. Consideration of condensed phases. Journal Physics D: Applied Physics, 2020, 53, 065203. | 1.3 | 7 |
| 36 | Calculation of two-temperature plasma composition: I. Mass action law methods and extremum searching methods. Journal Physics D: Applied Physics, 2020, 53, 065202. | 1.3 | 7 |

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| 37 | Effects of wire materials on radiative heat flux and spectral characteristics of a capillary discharge plasma jet. Journal Physics D: Applied Physics, 2020, 53, 075204. | 1.3 | 5 |
| 38 | Numerical study of the effects and transport mechanisms of iron vapour in tungsten inert-gas welding in argon. Journal Physics D: Applied Physics, 2020, 53, 044004. | 1.3 | 15 |
| 39 | Identifying Surface Reaction Intermediates in Plasma Catalytic Ammonia Synthesis. ACS Catalysis, 2020, 10, 14763-14774. | 5.5 | 86 |
| 40 | Investigation of the influence of buoyancy on gas convection of a horizontal xenon short arc lamp through 3D numerical simulation. Journal Physics D: Applied Physics, 2020, 53, 385205. | 1.3 | 1 |
| 41 | Investigation of transient metal vapour transport processes in helium arc welding by imaging spectroscopy. Journal Physics D: Applied Physics, 2020, 53, 425202. | 1.3 | 14 |
| 42 | Special issue on thermal-plasmaâ€“material interactions. Journal Physics D: Applied Physics, 2020, 53, 430201. | 1.3 | 0 |
| 43 | Three-dimensional chemical non-equilibrium simulation of an argon transferred arc with cross-flow. Journal Physics D: Applied Physics, 2020, 53, 305202. | 1.3 | 8 |
| 44 | Influence of Electrode Energy Balance on Gas Convective Pattern of a High-Pressure Xenon Short Arc Lamp. Plasma Chemistry and Plasma Processing, 2020, 40, 819-837. | 1.1 | 4 |
| 45 | Fundamental physicochemical properties of SF<sub>6</sub>-alternative gases: a review of recent progress. Journal Physics D: Applied Physics, 2020, 53, 173001. | 1.3 | 55 |
| 46 | Modelling of inhomogeneous mixing of plasma species in argonâ€“steam arc discharge for broad range of operating conditions. European Physical Journal D, 2020, 74, 1. | 0.6 | 6 |
| 47 | Numerical Simulation of the Behavior of Hydrogen Source in a Novel Welding Process to Reduce Diffusible Hydrogen. Materials, 2020, 13, 1619. | 1.3 | 3 |
| 48 | The 2020 plasma catalysis roadmap. Journal Physics D: Applied Physics, 2020, 53, 443001. | 1.3 | 362 |
| 49 | Chemical nonequilibrium modelling of a free-burning nitrogen arc. Journal Physics D: Applied Physics, 2020, 53, 505205. | 1.3 | 8 |
| 50 | Cathode spot formation possibly explained by cathode electron emission from impact of excited state atoms. Journal Physics D: Applied Physics, 2019, 52, 444004. | 1.3 | 4 |
| 51 | Multilayer weak shocks generated by restrike during underwater electrical explosion of Cu wires. Applied Physics Letters, 2019, 115, . | 1.5 | 17 |
| 52 | Numerical Simulation of Gas Flow in a Novel Torch for Reducing Diffusible Hydrogen. Journal of Smart Processing, 2019, 8, 219-224. | 0.0 | 1 |
| 53 | Investigation of the bilayer region of metal vapor in a helium tungsten inert gas arc plasma on stainless steel by imaging spectroscopy. Journal Physics D: Applied Physics, 2019, 52, 354003. | 1.3 | 23 |
| 54 | Modeling of a xenon short arc lamp considering the behavior of tungsten vapour evaporated from electrodes. Journal Physics D: Applied Physics, 2019, 52, 334001. | 1.3 | 11 |

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| 55 | Experimental Study of CO2 Decomposition in a DC Micro-slit Sustained Glow Discharge Reactor. Plasma Chemistry and Plasma Processing, 2019, 39, 825-844. | 1.1 | 9 |
| 56 | Understanding the nanoparticle formation during electrical wire explosion using a modified moment model. Plasma Sources Science and Technology, 2019, 28, 085010. | 1.3 | 20 |
| 57 | Numerical simulation of the flow characteristics inside a novel plasma spray torch. Journal Physics D: Applied Physics, 2019, 52, 335203. | 1.3 | 27 |
| 58 | Direct plasma printing of nano-gold from an inorganic precursor. Journal of Materials Chemistry C, 2019, 7, 6369-6374. | 2.7 | 27 |
| 59 | Heat Source Characteristics of Ternary-Gas-Shielded Tandem Narrow-Gap GMAW. Materials, 2019, 12, 1397. | 1.3 | 11 |
| 60 | A unified model for coupling mesoscopic dynamics of keyhole, metal vapor, arc plasma, and weld pool in laser-arc hybrid welding. Journal of Manufacturing Processes, 2019, 41, 119-134. | 2.8 | 22 |
| 61 | Decomposition mechanism and kinetics of iso-C4 perfluoronitrile (C4F7N) plasmas. Journal of Applied Physics, 2019, 126, . | 1.1 | 20 |
| 62 | Generation of Long Laminar Plasma Jets: Experimental and Numerical Analyses. Plasma Chemistry and Plasma Processing, 2019, 39, 377-394. | 1.1 | 20 |
| 63 | Influence of Thermodynamic and Transport Properties of Gas on Heat Load to Bulb of Xenon Short Arc Lamp. Journal of Smart Processing, 2019, 9, 148-155. | 0.0 | 0 |
| 64 | Properties of C<sub>4</sub>F<sub>7</sub>Nâ€“CO<sub>2</sub>thermal plasmas: thermodynamic properties, transport coefficients and emission coefficients. Journal Physics D: Applied Physics, 2018, 51, 155206. | 1.3 | 59 |
| 65 | SF<sub>6</sub>-alternative gases for application in gas-insulated switchgear. Journal Physics D: Applied Physics, 2018, 51, 153001. | 1.3 | 143 |
| 66 | Foundations of High-Pressure Thermal Plasmas. Plasma Sources Science and Technology, 2018, 27, 063001. | 1.3 | 56 |
| 67 | Modeling of inhomogeneous mixing of plasma species in argonâ€“steam arc discharge. Journal Physics D: Applied Physics, 2018, 51, 045202. | 1.3 | 6 |
| 68 | Plasma Catalysis as an Alternative Route for Ammonia Production: Status, Mechanisms, and Prospects for Progress. ACS Sustainable Chemistry and Engineering, 2018, 6, 15-31. | 3.2 | 144 |
| 69 | Numerical simulation of fume formation process in GMA welding. Welding in the World, Le Soudage Dans Le Monde, 2018, 62, 1331-1339. | 1.3 | 18 |
| 70 | Cold plasma treatment for cotton seed germination improvement. Scientific Reports, 2018, 8, 14372. | 1.6 | 82 |
| 71 | Cold plasma effect on the proteome of Pseudomonas aeruginosa â€“ Role for bacterioferritin. PLoS ONE, 2018, 13, e0206530. | 1.1 | 6 |
| 72 | Chemical kinetics analysis of two C5-perfluorinated ketone (C5 PFK) thermal decomposition products: C<sub>4</sub>F<sub>7</sub>O and C<sub>3</sub>F<sub>4</sub>O. Journal Physics D: Applied Physics, 2018, 51, 435202. | 1.3 | 12 |

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| 73 | Controlling the adsorption behavior of hydrogen at the interface of polycrystalline CVD graphene. International Journal of Hydrogen Energy, 2018, 43, 18735-18744. | 3.8 | 7 |
| 74 | Dual-layered nanocomposite membrane incorporating graphene oxide and halloysite nanotube for high osmotic power density and fouling resistance. Journal of Membrane Science, 2018, 564, 382-393. | 4.1 | 43 |
| 75 | Breakdown and current-voltage characteristics of DC micro-slit discharges in carbon dioxide. Plasma Sources Science and Technology, 2018, 27, 075011. | 1.3 | 5 |
| 76 | Heat Transfer in Arc Welding. , 2018, , 2657-2727. | | 4 |
| 77 | Influence of helium content on a ternary-gas-shielded GMAW process. Welding in the World, Le Soudage Dans Le Monde, 2018, 62, 973-984. | 1.3 | 11 |
| 78 | A computational model of gas tungsten arc welding of stainless steel: the importance of considering the different metal vapours simultaneously. Journal Physics D: Applied Physics, 2018, 51, 395202. | 1.3 | 24 |
| 79 | Chemical kinetic modeling and experimental study of SF<sub>6</sub> decomposition byproducts in 50 Hz ac point-plane corona discharges. Journal Physics D: Applied Physics, 2018, 51, 295202. | 1.3 | 12 |
| 80 | A desktop computer model of the arc, weld pool and workpiece in metal inert gas welding. Applied Mathematical Modelling, 2017, 44, 91-106. | 2.2 | 19 |
| 81 | Single-step ambient-air synthesis of graphene from renewable precursors as electrochemical genosensor. Nature Communications, 2017, 8, 14217. | 5.8 | 122 |
| 82 | Aiming for Modeling-Assisted Tailored Designs for Additive Manufacturing. Minerals, Metals and Materials Series, 2017, , 91-102. | 0.3 | 4 |
| 83 | Thermodynamic properties and transport coefficients of two-temperature helium thermal plasmas. Journal Physics D: Applied Physics, 2017, 50, 125202. | 1.3 | 5 |
| 84 | Numerical analysis of direct-current microdischarge for space propulsion applications using the particle-in-cell/Monte Carlo collision (PIC/MCC) method. Journal Physics D: Applied Physics, 2017, 50, 165203. | 1.3 | 13 |
| 85 | A collisional-radiative model of iron vapour in a thermal arc plasma. Journal Physics D: Applied Physics, 2017, 50, 22LT02. | 1.3 | 9 |
| 86 | A Coupled Chemical Kinetic and Nucleation Model of Fume Formation in Metalâ€“Inert-Gas/Metalâ€“Active-Gas Welding. Plasma Chemistry and Plasma Processing, 2017, 37, 805-823. | 1.1 | 9 |
| 87 | Kinetic modelling of NH<sub>3</sub>production in N<sub>2</sub>â€“H<sub>2</sub>non-equilibrium atmospheric-pressure plasma catalysis. Journal Physics D: Applied Physics, 2017, 50, 154005. | 1.3 | 88 |
| 88 | Hydrogen Plasma Processing of Iron Ore. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1561-1594. | 1.0 | 50 |
| 89 | Numerical Simulation of Nonequilibrium Species Diffusion in a Low-Power Nitrogenâ€“Hydrogen Arcjet Thruster. Plasma Chemistry and Plasma Processing, 2017, 37, 877-895. | 1.1 | 17 |
| 90 | Prediction of arc, weld pool and weld properties with a desktop computer model of metalâ€“inert-gas welding. Welding in the World, Le Soudage Dans Le Monde, 2017, 61, 623-633. | 1.3 | 11 |

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|---|---|---|---|
| 91 | Visualization and mechanisms of splashing erosion of electrodes in a DC air arc. Journal Physics D: Applied Physics, 2017, 50, 47LT01. | 1.3 | 29 |
| 92 | Calculation of thermodynamic properties and transport coefficients of C5F10O-CO2 thermal plasmas. Journal of Applied Physics, 2017, 122, . | 1.1 | 35 |
| 93 | Mixing of multiple metal vapours into an arc plasma in gas tungsten arc welding of stainless steel. Journal Physics D: Applied Physics, 2017, 50, 43LT03. | 1.3 | 15 |
| 94 | The 2017 Plasma Roadmap: Low temperature plasma science and technology. Journal Physics D: Applied Physics, 2017, 50, 323001. | 1.3 | 710 |
| 95 | Spectral characteristics of cotton seeds treated by a dielectric barrier discharge plasma. Scientific Reports, 2017, 7, 5601. | 1.6 | 48 |
| 96 | Evaluation of SF<sub>6</sub>-alternative gas C5-PFK based on arc extinguishing performance and electric strength. Journal Physics D: Applied Physics, 2017, 50, 385202. | 1.3 | 54 |
| 97 | Characterization of heat treatment-induced pore structure changes in cold-sprayed titanium. Materials Characterization, 2017, 132, 69-75. | 1.9 | 40 |
| 98 | Farewell to Stan VepÅ™ek, Founding Editor of Plasma Chemistry and Plasma Processing. Plasma Chemistry and Plasma Processing, 2017, 37, 1-4. | 1.1 | 7 |
| 99 | Calculation of thermodynamic properties and transport coefficients of CO<sub>2</sub>â€“O<sub>2</sub>â€“Cu mixtures. Journal Physics D: Applied Physics, 2017, 50, 345203. | 1.3 | 9 |
| 100 | Numerical study on thermal non-equilibrium of arc plasmas in TIG welding processes using a two-temperature model. Welding in the World, Le Soudage Dans Le Monde, 2017, 61, 197-207. | 1.3 | 17 |
| 101 | Modeling of Thermal Plasma Processes: The Importance of Twoâ€Way Plasmaâ€Surface Interactions. Plasma Processes and Polymers, 2017, 14, 1600177. | 1.6 | 14 |
| 102 | Heat Transfer in Arc Welding. , 2017, , 1-72. | | 3 |
| 103 | Gram positive and Gram negative bacteria differ in their sensitivity to cold plasma. Scientific Reports, 2016, 6, 38610. | 1.6 | 435 |
| 104 | Plasma Catalytic Synthesis of Ammonia Using Functionalized-Carbon Coatings in an Atmospheric-Pressure Non-equilibrium Discharge. Plasma Chemistry and Plasma Processing, 2016, 36, 917-940. | 1.1 | 74 |
| 105 | Investigation of mixing of plasma species in argon-water arc discharge. , 2016, , . | | 0 |
| 106 | Boundary conditions at the ablative walls in two-temperature modelling of thermal plasmas with reactive working gas. Journal Physics D: Applied Physics, 2016, 49, 375202. | 1.3 | 6 |
| 107 | Theoretical study of the neutral decomposition of SF<sub>6</sub>in the presence of H<sub>2</sub>O and O<sub>2</sub>in discharges in power equipment. Journal Physics D: Applied Physics, 2016, 49, 385203. | 1.3 | 65 |
| 108 | Study of the pitting effects during the pre-ignition plasmaâ€“propellant interaction process. Journal Physics D: Applied Physics, 2016, 49, 075201. | 1.3 | 11 |

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| 109 | Determination of the Dominant Species and Reactions in Non-equilibrium CO2 Thermal Plasmas with a Two-Temperature Chemical Kinetic Model. Plasma Chemistry and Plasma Processing, 2016, 36, 1301-1323. | 1.1 | 8 |
| 110 | Numerical simulation of GMAW process using Ar and an Arâ€“CO2 gas mixture. Welding in the World, Le Soudage Dans Le Monde, 2016, 60, 345-353. | 1.3 | 72 |
| 111 | Dominant particles and reactions in a two-temperature chemical kinetic model of a decaying SF<sub>6</sub> arc. Journal Physics D: Applied Physics, 2016, 49, 105502. | 1.3 | 30 |
| 112 | Calculated rate constants of the chemical reactions involving the main byproducts SO<sub>2</sub>F, SOF<sub>2</sub>, SO<sub>2</sub>F<sub>2</sub>of SF<sub>6</sub>decomposition in power equipment. Journal Physics D: Applied Physics, 2016, 49, 155502. | 1.3 | 82 |
| 113 | Draft Genome Sequence of Pseudomonas aeruginosa ATCC 9027 (DSM 1128), an Important Rhamnolipid Surfactant Producer and Sterility Testing Strain. Genome Announcements, 2015, 3, . | 0.8 | 22 |
| 114 | Influence of plasma characteristics on nitrogen mixing into shielding gas in helium gas tungsten arc welding. Welding International, 2015, 29, 325-333. | 0.3 | 0 |
| 115 | Investigation on critical breakdown electric field of hot carbon dioxide for gas circuit breaker applications. Journal Physics D: Applied Physics, 2015, 48, 055201. | 1.3 | 15 |
| 116 | Interaction of a H2O/Ar Plasma Jet with Nitrogen Atmosphere: Effect of the Method for Calculating Thermophysical Properties of the Gas Mixture on the Flow Field. Plasma Chemistry and Plasma Processing, 2015, 35, 365-386. | 1.1 | 4 |
| 117 | Numerical analysis of fume formation mechanism in TIG welding. Welding International, 2015, 29, 165-172. | 0.3 | 3 |
| 118 | Nitrogen absorption phenomenon of GTA welding with nitrogen-mixed shielding gases: effect of plasma characteristics on nitrogen content in GTA welded metal. Welding International, 2015, 29, 262-269. | 0.3 | 1 |
| 119 | Special Issue on Perspectives on Thermal Plasma Research for Industrial Applications: Introduction. Plasma Chemistry and Plasma Processing, 2015, 35, 415-416. | 1.1 | 0 |
| 120 | Comparison of the transport properties of two-temperature argon plasmas calculated using different methods. Plasma Sources Science and Technology, 2015, 24, 035011. | 1.3 | 11 |
| 121 | A Perspective on Arc Welding Research: The Importance of the Arc, Unresolved Questions and Future Directions. Plasma Chemistry and Plasma Processing, 2015, 35, 471-489. | 1.1 | 85 |
| 122 | The effects of plasma treatment on bacterial biofilm formation on vertically-aligned carbon nanotube arrays. RSC Advances, 2015, 5, 5142-5148. | 1.7 | 37 |
| 123 | Two-temperature thermodynamic and transport properties of SF6â€“Cu plasmas. Journal Physics D: Applied Physics, 2015, 48, 415205. | 1.3 | 7 |
| 124 | Prediction of the critical reduced electric field strength for carbon dioxide and its mixtures with copper vapor from Boltzmann analysis for a gas temperature range of 300â€‰K to 4000â€‰K at 0.4â€‰MPa. Journal of Applied Physics, 2015, 117, . | 1.1 | 18 |
| 125 | Calculation and application of combined diffusion coefficients in thermal plasmas. Scientific Reports, 2015, 4, 4304. | 1.6 | 29 |
| 126 | Pseudomonas aeruginosa Biofilm Response and Resistance to Cold Atmospheric Pressure Plasma Is Linked to the Redox-Active Molecule Phenazine. PLoS ONE, 2015, 10, e0130373. | 1.1 | 61 |

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| 127 | Analysis of dynamic plasma behaviors in gas metal arc welding by imaging spectroscopy. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2015, 33, 118-125. | 0.1 | 14 |
| 128 | Reliability evaluation of Fowler-Milne method in a temperature measurement of Gas Tungsten Arc. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2015, 33, 42-48. | 0.1 | 5 |
| 129 | Prediction of the dielectric strength for c-C<sub>4</sub>F<sub>8</sub>mixtures with CF<sub>4</sub>, CO<sub>2</sub>, N<sub>2</sub>, O<sub>2</sub>and air by Boltzmann equation analysis. Journal Physics D: Applied Physics, 2014, 47, 425204. | 1.3 | 27 |
| 130 | Combined diffusion coefficients for a mixture of three ionized gases. Plasma Sources Science and Technology, 2014, 23, 065044. | 1.3 | 12 |
| 131 | Prediction of the critical reduced electric field strength for carbon dioxide and its mixtures with 50% O<sub>2</sub>and 50% H<sub>2</sub>from Boltzmann analysis for gas temperatures up to 3500 K at atmospheric pressure. Journal Physics D: Applied Physics, 2014, 47, 325203. | 1.3 | 18 |
| 132 | Experimental and theoretical study of internal fault arc in a closed container. Journal Physics D: Applied Physics, 2014, 47, 505204. | 1.3 | 23 |
| 133 | Calculation of combined diffusion coefficients in SF6-Cu mixtures. Physics of Plasmas, 2014, 21, 103506. | 0.7 | 17 |
| 134 | Atmospheric pressure plasmas: Infection control and bacterial responses. International Journal of Antimicrobial Agents, 2014, 43, 508-517. | 1.1 | 208 |
| 135 | Analysis of energy flow in gas metal arc welding processes through self-consistent three-dimensional process simulation. International Journal of Heat and Mass Transfer, 2014, 68, 215-223. | 2.5 | 35 |
| 136 | Two-Temperature Chemical-Nonequilibrium Modelling of a High-Velocity Argon Plasma Flow in a Low-Power Arcjet Thruster. Plasma Chemistry and Plasma Processing, 2014, 34, 559-577. | 1.1 | 22 |
| 137 | Effects of shielding gas composition on arc profile and molten pool dynamics in gas metal arc welding of steels. Journal Physics D: Applied Physics, 2014, 47, 465202. | 1.3 | 31 |
| 138 | Production of Ammonia by Heterogeneous Catalysis in a Packed-Bed Dielectric-Barrier Discharge: Influence of Argon Addition and Voltage. IEEE Transactions on Plasma Science, 2014, 42, 2338-2339. | 0.6 | 47 |
| 139 | Special Issue of Papers by Plenary and Topical Invited Lecturers at 21st International Symposium on Plasma Chemistry (ISPC 21), 4â€“9 August 2013, Cairns, Australia: Introduction. Plasma Chemistry and Plasma Processing, 2014, 34, 361-362. | 1.1 | 1 |
| 140 | In Gratitude to Steven Girshick. Plasma Chemistry and Plasma Processing, 2014, 34, 703-704. | 1.1 | 0 |
| 141 | Thermodynamic properties and transport coefficients of arc lamp plasmas: argon, krypton and xenon. Journal Physics D: Applied Physics, 2014, 47, 295202. | 1.3 | 46 |
| 142 | Atmospheric gas plasmaâ€“induced ROS production activates TNF-ASK1 pathway for the induction of melanoma cancer cell apoptosis. Molecular Biology of the Cell, 2014, 25, 1523-1531. | 0.9 | 166 |
| 143 | Numerical analysis of Al vapour effects in gas metal arc welding of Al alloys. Science and Technology of Welding and Joining, 2014, 19, 361-368. | 1.5 | 10 |
| 144 | Modelling Lightning Initiation and Attachment to Aircraft. Journal of Physics: Conference Series, 2014, 550, 012002. | 0.3 | 0 |

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| 145 | Metal Vapour in Atmospheric-Pressure Arcs. IEEJ Transactions on Power and Energy, 2014, 134, 199-202. | 0.1 | 2 |
| 146 | Study of the dielectric breakdown properties of hot SF6â€“CF4 mixtures at 0.01â€“1.6â€‰MPa. Journal of Applied Physics, 2013, 114, . | 1.1 | 36 |
| 147 | Effect of plasma heat source characteristics on nitrogen absorption in gas tungsten arc weld metal. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 925-932. | 1.3 | 4 |
| 148 | Influence of metal vapour on arc temperatures in gasâ€“metal arc welding: convection versus radiation. Journal Physics D: Applied Physics, 2013, 46, 224004. | 1.3 | 48 |
| 149 | Numerical modelling of the nonequilibrium expansion process of argon plasma flow through a nozzle. Journal Physics D: Applied Physics, 2013, 46, 505205. | 1.3 | 16 |
| 150 | Thermal plasma properties for Arâ€“Cu, Arâ€“Fe and Arâ€“Al mixtures used in welding plasmas processes: II. Transport coefficients at atmospheric pressure. Journal Physics D: Applied Physics, 2013, 46, 415207. | 1.3 | 38 |
| 151 | Visualization of fume formation process in arc welding with numerical simulation. Surface and Coatings Technology, 2013, 228, S301-S305. | 2.2 | 9 |
| 152 | Low-voltage circuit breaker arcsâ€”simulation and measurements. Journal Physics D: Applied Physics, 2013, 46, 273001. | 1.3 | 66 |
| 153 | A numerical model of non-equilibrium thermal plasmas. I. Transport properties. Physics of Plasmas, 2013, 20, 033508. | 0.7 | 43 |
| 154 | Dielectric breakdown properties of SF6â€“N2 mixtures at 0.01â€“1.6 MPa and 300â€“3000 K. Journal of Applied Physics, 2013, 113, . | 1.1 | 53 |
| 155 | Arc welding, plasma cutting and plasma spraying. Journal Physics D: Applied Physics, 2013, 46, 220301. | 1.3 | 4 |
| 156 | Numerical analysis of the influence of particle charging on the fume formation process in arc welding. Journal Physics D: Applied Physics, 2013, 46, 224007. | 1.3 | 7 |
| 157 | Theoretical investigation of the decay of an SF<sub>6</sub>gas-blast arc using a two-temperature hydrodynamic model. Journal Physics D: Applied Physics, 2013, 46, 065203. | 1.3 | 28 |
| 158 | Investigation on critical breakdown electric field of hot sulfur hexafluoride/carbon tetrafluoride mixtures for high voltage circuit breaker applications. Journal of Applied Physics, 2013, 114, 103301. | 1.1 | 41 |
| 159 | Influence of droplets in gasâ€“metal arc welding: new modelling approach, and application to welding of aluminium. Science and Technology of Welding and Joining, 2013, 18, 32-37. | 1.5 | 27 |
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