

Ursula van Rienen

List of Publications by Year in descending order

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160
papers

1,732
citations

361413

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174
all docs

174
docs citations

174
times ranked

1809
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | DBS imaging methods III: Estimating the electric field and volume of tissue activated. , 2022, , 147-168. | | 2 |
| 2 | An artefact-based workflow for finite element simulation studies. Simulation Modelling Practice and Theory, 2022, 116, 102464. | 3.8 | 1 |
| 3 | Multiobjective design optimization of a quadrupole resonator under uncertainties. Physical Review Accelerators and Beams, 2022, 25, . | 1.6 | 2 |
| 4 | Deep brain stimulation electrode modeling in rats. Experimental Neurology, 2022, 350, 113978. | 4.1 | 4 |
| 5 | Personalizing Deep Brain Stimulation Using Advanced Imaging Sequences. Annals of Neurology, 2022, 91, 613-628. | 5.3 | 22 |
| 6 | Numerical study on the effect of capacitively coupled electrical stimulation on biological cells considering model uncertainties. Scientific Reports, 2022, 12, 4744. | 3.3 | 3 |
| 7 | Reply to "Deep Brain Stimulation for Tremor: Direct Targeting of a Novel Imaging Biomarker". Annals of Neurology, 2022, 92, 343-344. | 5.3 | 1 |
| 8 | The interplay of collagen/bioactive glass nanoparticle coatings and electrical stimulation regimes distinctly enhanced osteogenic differentiation of human mesenchymal stem cells. Acta Biomaterialia, 2022, 149, 373-386. | 8.3 | 9 |
| 9 | Deep brain stimulation by optimized stimulators in a phenotypic model of dystonia: Effects of different frequencies. Neurobiology of Disease, 2021, 147, 105163. | 4.4 | 11 |
| 10 | Influence of Neuronal Morphology on the Shape of Extracellular Recordings With Microelectrode Arrays: A Finite Element Analysis. IEEE Transactions on Biomedical Engineering, 2021, 68, 1317-1329. | 4.2 | 10 |
| 11 | Numerical Study on Electrode Design for Rodent Deep Brain Stimulation With Implantations Cranial to Targeted Nuclei. Frontiers in Computational Neuroscience, 2021, 15, 631188. | 2.1 | 2 |
| 12 | Uncertainty in the isosceles multipactor threshold of triangularly grooved surfaces based on polynomial chaos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 993, 165001. | 1.6 | 3 |
| 13 | Finite element analysis of bone remodelling with piezoelectric effects using an open-source framework. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1147-1166. | 2.8 | 8 |
| 14 | Automatic Actin Filament Quantification and Cell Shape Modeling of Osteoblasts on Charged Ti Surfaces. Applied Sciences (Switzerland), 2021, 11, 5689. | 2.5 | 5 |
| 15 | Mechanisms of pallidal deep brain stimulation: Alteration of cortico-striatal synaptic communication in a dystonia animal model. Neurobiology of Disease, 2021, 154, 105341. | 4.4 | 5 |
| 16 | Numerical Simulation of Electric Field Distribution around an Instrumented Total Hip Stem. Applied Sciences (Switzerland), 2021, 11, 6677. | 2.5 | 8 |
| 17 | Ambiguity in the interpretation of the low-frequency dielectric properties of biological tissues. Bioelectrochemistry, 2021, 140, 107773. | 4.6 | 15 |
| 18 | rf measurements and tuning of the 1-m-long 750MHz radio-frequency quadrupole for artwork analysis. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1011, 165564. | 1.6 | 2 |

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| 19 | Computational Analysis of Bone Remodeling in the Proximal Tibia Under Electrical Stimulation Considering the Piezoelectric Properties. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 705199. | 4.1 | 4 |
| 20 | Numerical Study of Facial Nerve Stimulation After Cochlear Implant Surgery. , 2021, , . | | 0 |
| 21 | Using a Digital Twin of an Electrical Stimulation Device to Monitor and Control the Electrical Stimulation of Cells in vitro. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 765516. | 4.1 | 16 |
| 22 | Computational study on electromechanics of electroactive hydrogels for cartilage-tissue repair. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 197, 105739. | 4.7 | 6 |
| 23 | Neural Tissue Degeneration in Rosenthalâ€™s Canal and Its Impact on Electrical Stimulation of the Auditory Nerve by Cochlear Implants: An Image-Based Modeling Study. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8511. | 4.1 | 3 |
| 24 | Numerical Simulations as Means for Tailoring Electrically Conductive Hydrogels towards Cartilage Tissue Engineering by Electrical Stimulation. <i>Molecules</i> , 2020, 25, 4750. | 3.8 | 6 |
| 25 | Establishment and Evaluation of an In Vitro System for Biophysical Stimulation of Human Osteoblasts. <i>Cells</i> , 2020, 9, 1995. | 4.1 | 7 |
| 26 | A General Theoretical Framework to Study the Influence of Electrical Fields on Mesenchymal Stem Cells. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 557447. | 4.1 | 6 |
| 27 | OSS-DBS: Open-source simulation platform for deep brain stimulation with a comprehensive automated modeling. <i>PLoS Computational Biology</i> , 2020, 16, e1008023. | 3.2 | 30 |
| 28 | Uncertainty modeling and analysis of the European X-ray free electron laser cavities manufacturing process. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 971, 164135. | 1.6 | 3 |
| 29 | Title is missing!. , 2020, 16, e1008023. | | 0 |
| 30 | Title is missing!. , 2020, 16, e1008023. | | 0 |
| 31 | Title is missing!. , 2020, 16, e1008023. | | 0 |
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| 33 | Numerical Analysis of Electromechanically Driven Bone Remodeling Using the Open-source Software Framework. , 2019, 2019, 6466-6471. | | 3 |
| 34 | Numerical Simulation of Electroactive Hydrogels for Cartilageâ€™Tissue Engineering. <i>Materials</i> , 2019, 12, 2913. | 2.9 | 10 |
| 35 | Monitoring of a dielectric barrier discharge-based process using the gas gap voltage. <i>Plasma Sources Science and Technology</i> , 2019, 28, 025002. | 3.1 | 5 |
| 36 | Establishment of a Numerical Model to Design an Electro-Stimulating System for a Porcine Mandibular Critical Size Defect. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2160. | 2.5 | 18 |

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| 37 | Evaluation of Epistemic Uncertainties for Bipolar Deep Brain Stimulation in Rodent Models. , 2019, 2019, 2136-2140. | | 6 |
| 38 | Simulation Experiment Schemas –Beyond Tools and Simulation Approaches. , 2019, , . | | 7 |
| 39 | HOM damping options for the Z-Pole operating scenario of FCC-ee. Journal of Physics: Conference Series, 2019, 1350, 012007. | 0.4 | 0 |
| 40 | PROVenance Patterns in Numerical Modelling and Finite Element Simulation Processes of Bio-electric Systems*. , 2019, 2019, 3377-3382. | | 0 |
| 41 | Numerical simulation of the electric field distribution in an electrical stimulation device for scaffolds settled with cartilaginous cells. , 2019, 2019, 6481-6484. | | 1 |
| 42 | Extracellular Stimulation of Neural Tissues: Activating Function and Sub-threshold Potential Perspective *. , 2019, 2019, 6273-6277. | | 1 |
| 43 | Requirements for Documenting Electrical Cell Stimulation Experiments for Replicability and Numerical Modeling. , 2019, 2019, 1082-1088. | | 9 |
| 44 | Human Osteoblast Migration in DC Electrical Fields Depends on Store Operated Ca ²⁺ -Release and Is Correlated to Upregulation of Stretch-Activated TRPM7 Channels. Frontiers in Bioengineering and Biotechnology, 2019, 7, 422. | 4.1 | 19 |
| 45 | Computation of lossy higher order modes in complex SRF cavities using Beynâ€™s and Newtonâ€™s methods on reduced order models. International Journal of Modern Physics A, 2019, 34, 1942037. | 1.5 | 0 |
| 46 | Numerical Study on Electromechanics in Cartilage Tissue with Respect to Its Electrical Properties. Tissue Engineering - Part B: Reviews, 2019, 25, 152-166. | 4.8 | 17 |
| 47 | rf design studies on the 750MHz radio frequency quadrupole linac for proton-induced x-ray emission analysis. Physical Review Accelerators and Beams, 2019, 22, . | 1.6 | 6 |
| 48 | Constrained multiobjective shape optimization of superconducting rf cavities considering robustness against geometric perturbations. Physical Review Accelerators and Beams, 2019, 22, . | 1.6 | 8 |
| 49 | Adaptive Estimation of the Neural Activation Extent in Computational Volume Conductor Models of Deep Brain Stimulation. IEEE Transactions on Biomedical Engineering, 2018, 65, 1828-1839. | 4.2 | 6 |
| 50 | Uncertainty Quantification of Oscillation Suppression During DBS in a Coupled Finite Element and Network Model. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 281-290. | 4.9 | 4 |
| 51 | Effect of Tissue Heterogeneity on the Transmembrane Potential of Type-1 Spiral Ganglion Neurons: A Simulation Study. IEEE Transactions on Biomedical Engineering, 2018, 65, 658-668. | 4.2 | 6 |
| 52 | Semi-analytical representation of the activation level in stress fibre directions as alternative to the angular representation in the bio-chemo-mechanical model for cell contractility. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 527-533. | 3.1 | 2 |
| 53 | Eigenmode computation of cavities with perturbed geometry using matrix perturbation methods applied on generalized eigenvalue problems. Journal of Computational Physics, 2018, 364, 347-364. | 3.8 | 9 |
| 54 | Preliminary Numerical Study on Electrical Stimulation at Alloplastic Reconstruction Plates of the Mandible. Mathematics in Industry, 2018, , 3-11. | 0.3 | 2 |

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| 55 | An efficient 2D implementation of a bio-chemo-mechanical model employing a quadratic representation to study cells on micro-post arrays. <i>Finite Elements in Analysis and Design</i> , 2018, 146, 16-27. | 3.2 | 1 |
| 56 | Rayleigh-Ritz based expansion method for wakefields in dielectrically lined rectangular waveguides. <i>Journal of Computational Physics</i> , 2018, 372, 299-315. | 3.8 | 3 |
| 57 | Simulation of actin distribution of osteoblasts on titanium pillar arrays using a bio-chemo-mechanical model. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018, 34, e3097. | 2.1 | 3 |
| 58 | Systematic study of multipactor suppression techniques for a superconducting rf gun. <i>Physical Review Accelerators and Beams</i> , 2018, 21, . | 1.6 | 9 |
| 59 | Investigation and control of the mO_3 to NO -transition in a novel sub-atmospheric pressure dielectric barrier discharge. <i>Plasma Sources Science and Technology</i> , 2017, 26, 065005. | 3.1 | 14 |
| 60 | Low-Dimensional Stochastic Modeling of the Electrical Properties of Biological Tissues. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-4. | 2.1 | 2 |
| 61 | Effect of Morphologic Features of Neurons on the Extracellular Electric Potential: A Simulation Study Using Cable Theory and Electro-Quasi-Static Equations. <i>Neural Computation</i> , 2017, 29, 2955-2978. | 2.2 | 11 |
| 62 | Numerical design studies on a novel electrostimulative osteosynthesis system for the mandible. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 613-617. | 0.4 | 1 |
| 63 | Comparison of coaxial higher order mode couplers for the CERN Superconducting Proton Linac study. <i>Physical Review Accelerators and Beams</i> , 2017, 20, . | 1.6 | 3 |
| 64 | Eigenmode compendium of the third harmonic module of the European X-ray Free Electron Laser. <i>Physical Review Accelerators and Beams</i> , 2017, 20, . | 1.6 | 2 |
| 65 | A comparative study of approaches to compute the field distribution of deep brain stimulation in the Hemiparkinson rat model. , 2016, 2016, 5821-5824. | | 1 |
| 66 | Challenges in modeling nerve-electrode interactions of neuronal implants. , 2016, , . | | 0 |
| 67 | An implementation for the simulation of cells on micro-post arrays. , 2016, 2016, 6138-6141. | | 2 |
| 68 | Low-dimensional stochastic modeling of the electrical properties of biological tissues. , 2016, , . | | 0 |
| 69 | A Fast Poisson Solver for 3-D Space Charge Calculations in a CPU+GPU Heterogeneous Routine. <i>IEEE Transactions on Magnetics</i> , 2016, 52, 1-4. | 2.1 | 1 |
| 70 | An automatic approach for calibrating dielectric bone properties by combining finite-element and optimization software tools. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1306-1313. | 1.6 | 3 |
| 71 | Investigation of Geometric Variations for Multicell Cavities Using Perturbative Methods. <i>IEEE Transactions on Magnetics</i> , 2016, 52, 1-4. | 2.1 | 1 |
| 72 | Efficiency optimization of a fast Poisson solver in beam dynamics simulation. <i>Computer Physics Communications</i> , 2016, 198, 82-96. | 7.5 | 3 |

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| 73 | Efficient Computation of the Neural Activation During Deep Brain Stimulation for Dispersive Electrical Properties of Brain Tissue. IEEE Transactions on Magnetics, 2016, 52, 1-4. | 2.1 | 6 |
| 74 | Systematical study on superconducting radio frequency elliptic cavity shapes applicable to future high energy accelerators and energy recovery linacs. Physical Review Accelerators and Beams, 2016, 19, . | 1.6 | 4 |
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| 76 | 3D axonal network coupled to Microelectrode Arrays: A simulation model to study neuronal dynamics. , 2015, 2015, 4700-4. | | 1 |
| 77 | Impact of uncertain head tissue conductivity in the optimization of transcranial direct current stimulation for an auditory target. Journal of Neural Engineering, 2015, 12, 046028. | 3.5 | 65 |
| 78 | The impact of bone microstructure on the field distribution of electrostimulative implants. , 2015, 2015, 3545-8. | | 1 |
| 79 | Modeling of an Optimized Electrostimulative Hip Revision System Under Consideration of Uncertainty in the Conductivity of Bone Tissue. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1321-1330. | 6.3 | 20 |
| 80 | A dielectrically lined rectangular waveguide as a wakefield dechirper for ELBE. , 2015, , . | | 0 |
| 81 | Analysis of higher order modes in large superconducting radio frequency accelerating structures. , 2015, , . | | 0 |
| 82 | Computational Benefits Using an Advanced Concatenation Scheme Based on Reduced Order Models for RF Structures. Physics Procedia, 2015, 79, 38-45. | 1.2 | 1 |
| 83 | Modeling and simulation of platelet reaction and diffusion towards an electro-stimulating dental implant. , 2015, 2015, 2584-7. | | 2 |
| 84 | Simulating the therapeutic effects of deep brain stimulation in rodents using a cortico-basal ganglia network and volume conductor model. , 2015, , . | | 1 |
| 85 | Numerical studies of the behavior of ionized residual gas in an energy recovering linac. Physical Review Special Topics: Accelerators and Beams, 2015, 18, . | 1.8 | 3 |
| 86 | Comparison of techniques for uncertainty quantification of superconducting radio frequency cavities. , 2014, , . | | 5 |
| 87 | Time-Domain Absorbing Boundary Terminations for Waveguide Ports Based on State-Space Models. IEEE Transactions on Magnetics, 2014, 50, 145-148. | 2.1 | 7 |
| 88 | Uncertainty quantification of the optimal stimulation area in an electro-stimulative hip revision system. , 2014, 2014, 824-7. | | 1 |
| 89 | Scattering parameters of the 3.9ÅGHz accelerating module in a free-electron laser linac: A rigorous comparison between simulations and measurements. Physical Review Special Topics: Accelerators and Beams, 2014, 17, . | 1.8 | 4 |
| 90 | An Automatic Pareto Classifier for the Multiobjective Optimization of an Electrostimulative Acetabular Revision System. IEEE Transactions on Magnetics, 2014, 50, 741-744. | 2.1 | 55 |

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| 91 | Correction to "Comparison of Krylov-Type Methods for Complex Linear Systems Applied to High-Voltage Problems". IEEE Transactions on Magnetics, 2014, 50, 1-1. | 2.1 | 1 |
| 92 | Evaluation of electric field distribution in electromagnetic stimulation of human femoral head. Bioelectromagnetics, 2014, 35, 547-558. | 1.6 | 11 |
| 93 | On the optimization of the hip stem for an electrostimulative hip revision system. , 2014, , . | | 0 |
| 94 | Would an endosteal CI-electrode make sense? Comparison of the auditory nerve excitability from different stimulation sites using ESRT measurements and mathematical models. European Archives of Oto-Rhino-Laryngology, 2013, 271, 1375-81. | 1.6 | 5 |
| 95 | Influence of Uncertainties in the Material Properties of Brain Tissue on the Probabilistic Volume of Tissue Activated. IEEE Transactions on Biomedical Engineering, 2013, 60, 1378-1387. | 4.2 | 66 |
| 96 | Compact Time-Domain Models of Complex RF Structures Based on the Real Eigenmodes of Segments. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2282-2294. | 4.6 | 13 |
| 97 | Some uncertainty aspects in models for neural engineering. , 2013, , . | | 1 |
| 98 | Global sensitivity analysis of the probabilistic volume of tissue activated in a volume conductor model for deep brain stimulation. , 2013, , . | | 3 |
| 99 | Spatial variation of permittivity of an electrolyte solution in contact with a charged metal surface: a mini review. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 463-480. | 1.6 | 38 |
| 100 | Changes of the Electric Field Distribution in the Femoral Head Due to Position and Design of an Electro-Stimulating Implant. Biomedizinische Technik, 2013, 58 Suppl 1, . | 0.8 | 1 |
| 101 | Quantification of uncertainties in brain tissue conductivity in a heterogeneous model of deep brain stimulation using a non-intrusive projection approach. , 2012, 2012, 4136-9. | | 4 |
| 102 | Identification of widely applicable configurations for the electrostimulative total hip revision system. , 2012, 2012, 3048-51. | | 3 |
| 103 | Sensitivity analysis of the field distribution in Deep Brain Stimulation with respect to the anisotropic conductivity of brain tissue. Biomedizinische Technik, 2012, 57, . | 0.8 | 1 |
| 104 | A Comparison of the Hodgkin-Huxley Model and the Soliton Theory for the Action Potential in Nerves. Behavior Research Methods, 2012, , 275-299. | 4.0 | 27 |
| 105 | Modeling the Field Distribution in Deep Brain Stimulation: The Influence of Anisotropy of Brain Tissue. IEEE Transactions on Biomedical Engineering, 2012, 59, 1583-1592. | 4.2 | 62 |
| 106 | Mechanics and electrostatics of the interactions between osteoblasts and titanium surface. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 469-482. | 1.6 | 70 |
| 107 | Adhesion of osteoblasts to a nanorough titanium implant surface. International Journal of Nanomedicine, 2011, 6, 1801. | 6.7 | 117 |
| 108 | Electromechanical Basis for the Interaction Between Osteoblasts and Negatively Charged Titanium Surface. Behavior Research Methods, 2011, 13, 199-221. | 4.0 | 2 |

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| 109 | Attachment of Rod-Like (BAR) Proteins and Membrane Shape. Mini-Reviews in Medicinal Chemistry, 2011, 11, 272-282. | 2.4 | 35 |
| 110 | Exploring the binding dynamics of BAR proteins. Cellular and Molecular Biology Letters, 2011, 16, 398-411. | 7.0 | 6 |
| 111 | Generalized stern models of the electric double layer considering the spatial variation of permittivity and finite size of ions in saturation regime. Cellular and Molecular Biology Letters, 2011, 16, 576-94. | 7.0 | 56 |
| 112 | Time-Domain Field and Scattering Parameter Computation in Waveguide Structures by GPU-Accelerated Discontinuous-Galerkin Method. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2788-2797. | 4.6 | 15 |
| 113 | Combination of neural-mass models with anisotropic head models to simulate EEG signals. , 2011, , . | | 1 |
| 114 | Langevin Poisson-Boltzmann equation: point-like ions and water dipoles near a charged surface. General Physiology and Biophysics, 2011, 30, 130-137. | 0.9 | 51 |
| 115 | Multiobjective Optimization of an Electrostimulative Acetabular Revision System. IEEE Transactions on Biomedical Engineering, 2010, 57, 460-468. | 4.2 | 12 |
| 116 | An electrical double layer model with spatial variation of the permittivity. , 2010, , . | | 0 |
| 117 | Spatial Variation of Permittivity near a Charged Membrane in Contact with Electrolyte Solution. Behavior Research Methods, 2010, , 101-126. | 4.0 | 6 |
| 118 | Extraction of effective permittivity and permeability of metallic powders in the microwave range. Modelling and Simulation in Materials Science and Engineering, 2010, 18, 025015. | 2.0 | 35 |
| 119 | Challenges in bio-electromagnetic modeling. , 2010, , . | | 1 |
| 120 | Numerically optimized shape of directly heated electrodes for minimal temperature gradients. Sensors and Actuators B: Chemical, 2009, 137, 363-369. | 7.8 | 7 |
| 121 | A New Concept of an Electrostimulative Acetabular Revision System with Patient Individual Additional Fixation. IFMBE Proceedings, 2009, , 1847-1850. | 0.3 | 3 |
| 122 | Periprosthetic Fields and Currents of an Electrostimulative Acetabular Revision System. IFMBE Proceedings, 2009, , 1808-1811. | 0.3 | 3 |
| 123 | A Self-Adaptive Multigrid Technique for 3-D Space Charge Calculations. IEEE Transactions on Magnetics, 2008, 44, 1242-1245. | 2.1 | 5 |
| 124 | Computation of Land Mine Signatures Using Domain Decomposition With Lagrange Multipliers. IEEE Transactions on Magnetics, 2007, 43, 1189-1192. | 2.1 | 5 |
| 125 | Matching geometry and stimulation parameters of electrodes for deep brain stimulation experimentsâ€”Numerical considerations. Journal of Neuroscience Methods, 2006, 150, 212-227. | 2.5 | 47 |
| 126 | Simulation of slowly varying electromagnetic fields in the human body considering the anisotropy of muscle tissues. IEEE Transactions on Magnetics, 2006, 42, 747-750. | 2.1 | 6 |

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| 127 | Choosing electrodes for deep brain stimulation experimentsâ€“electrochemical considerations. Journal of Neuroscience Methods, 2005, 142, 251-265. | 2.5 | 116 |
| 128 | Integral formulation for large-scale eddy current computation of a Superconducting magnet system. IEEE Transactions on Magnetics, 2005, 41, 1424-1427. | 2.1 | 3 |
| 129 | Multigrid Algorithms for the Fast Calculation of Space-Charge Effects in Accelerator Design. IEEE Transactions on Magnetics, 2004, 40, 714-717. | 2.1 | 44 |
| 130 | Fast algorithm for transient 3D eddy-current calculations in the Wendelstein 7-X stellarator. IET Science, Measurement and Technology, 2004, 151, 407-410. | 0.7 | 0 |
| 131 | Application of Conformal FIT for Eddy Current Calculation in Coils of a Superconducting Magnet System. IEEE Transactions on Magnetics, 2004, 40, 671-674. | 2.1 | 2 |
| 132 | Fast Calculation of Space Charge in Beam Line Tracking by Multigrid Techniques. Mathematics in Industry, 2004, , 329-336. | 0.3 | 4 |
| 133 | Algebraic multigrid for complex symmetric matrices and applications. Journal of Computational and Applied Mathematics, 2003, 155, 405-421. | 2.0 | 13 |
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| 135 | Modeling and Simulation of Electro-Quasistatic Fields. , 2003, , 17-31. | | 11 |
| 136 | CSC - A procedure for coupled S-parameter calculations. IEEE Transactions on Magnetics, 2002, 38, 1173-1176. | 2.1 | 10 |
| 137 | Computation of higher order modes in TESLA structures. International Journal of Applied Electromagnetics and Mechanics, 2002, 14, 237-242. | 0.6 | 1 |
| 138 | Frequency Domain Analysis of Waveguides and Resonators with FIT on Non-orthogonal Triangular Grids. Progress in Electromagnetics Research, 2001, 32, 357-381. | 4.4 | 5 |
| 139 | Frequency Domain Analysis of Waveguides and Resonators With Fit On Non-Orthogonal Triangular Grids- Abstract. Journal of Electromagnetic Waves and Applications, 2001, 15, 557-558. | 1.6 | 3 |
| 140 | Numerical Methods in Computational Electrodynamics. Lecture Notes in Computational Science and Engineering, 2001, , . | 0.3 | 43 |
| 141 | Classical Electrodynamics. Lecture Notes in Computational Science and Engineering, 2001, , 11-34. | 0.3 | 3 |
| 142 | Eigenmode calculation of complex RF-structures using S-parameters. IEEE Transactions on Magnetics, 2000, 36, 1501-1503. | 2.1 | 7 |
| 143 | An iterative algorithm to evaluate multimodal S-parameter-measurements. IEEE Transactions on Magnetics, 2000, 36, 1841-1845. | 2.1 | 7 |
| 144 | Eigenmodes of superconducting cavities calculated on APE-supercomputers. IEEE Transactions on Magnetics, 2000, 36, 1510-1513. | 2.1 | 0 |

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| 145 | Investigations of trapped higher order modes using a 36-cell test structure. Physical Review Special Topics: Accelerators and Beams, 1999, 2, . | 1.8 | 3 |
| 146 | Finite integration technique on triangular grids revisited. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1999, 12, 107-128. | 1.9 | 7 |
| 147 | Comparison of Krylov-type methods for complex linear systems applied to high-voltage problems. IEEE Transactions on Magnetics, 1998, 34, 3335-3338. | 2.1 | 31 |
| 148 | Consistent finite integration approach for coupled computation of static current distributions and electromagnetic fields. IEEE Transactions on Magnetics, 1998, 34, 3098-3101. | 2.1 | 3 |
| 149 | Simulation of low-frequency fields on high-voltage insulators with light contaminations. IEEE Transactions on Magnetics, 1996, 32, 816-819. | 2.1 | 21 |
| 150 | Impedance calculation with URMEL-I using multigrid methods. IEEE Transactions on Magnetics, 1990, 26, 743-746. | 2.1 | 1 |
| 151 | Waveguide calculations using established codes. IEEE Transactions on Electron Devices, 1988, 35, 2044-2047. | 3.0 | 6 |
| 152 | Triangular discretization method for the evaluation of RF-fields in cylindrically symmetric cavities. IEEE Transactions on Magnetics, 1985, 21, 2317-2320. | 2.1 | 36 |
| 153 | Calculation of HOMs in TESLA-cavities using the coupled S-parameter calculation method. , 0, , . | | 1 |
| 154 | RF computations with the finite integration technique (FIT) and the coupled S-parameter calculation (CSC). , 0, , . | | 0 |
| 155 | Computation of Land Mine Signatures using Domain Decomposition with Lagrange Multipliers. , 0, , . | | 0 |
| 156 | A comparison of Hodgkin-Huxley and soliton neural theories. Advances in Radio Science, 0, 8, 75-79. | 0.7 | 20 |
| 157 | Computation of electrostatic fields in anisotropic human tissues using the Finite Integration Technique (FIT). Advances in Radio Science, 0, 2, 309-313. | 0.7 | 3 |
| 158 | Berechnung des Hochfrequenzverhaltens komplexer Strukturen mit der Methode gekoppelter Streuparameter " CSC. Advances in Radio Science, 0, 2, 45-49. | 0.7 | 1 |
| 159 | Computation of currents induced by ELF electric fields in anisotropic human tissues using the Finite Integration Technique (FIT). Advances in Radio Science, 0, 3, 227-231. | 0.7 | 6 |
| 160 | Electro-Quasistatic Simulations in Bio-Systems Engineering and Medical Engineering. Advances in Radio Science, 0, 3, 39-49. | 0.7 | 21 |