# Robert Ivkov

List of Publications by Year
in descending order



| 77 | 4,631 | 109264<br>35 | 98753<br>67 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 79 | 79 | 79 | 5269 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Effect of magnetic dipolar interactions on nanoparticle heating efficiency: Implications for cancer hyperthermia. Scientific Reports, 2013, 3, 2887. | 1.6 | 309 |
| 2 | Physics of heat generation using magnetic nanoparticles for hyperthermia. International Journal of Hyperthermia, 2013, 29, 715-729. | 1.1 | 279 |
| 3 | Magnetic hyperthermia therapy for the treatment of glioblastoma: a review of the therapyâ€™s history, efficacy and application in humans. International Journal of Hyperthermia, 2018, 34, 1316-1328. | 1.1 | 260 |
| 4 | Nearly complete regression of tumors via collective behavior of magnetic nanoparticles in hyperthermia. Nanotechnology, 2009, 20, 395103. | 1.3 | 227 |
| 5 | Cancer therapy with iron oxide nanoparticles: Agents of thermal and immune therapies. Advanced Drug Delivery Reviews, 2020, 163-164, 65-83. | 6.6 | 214 |
| 6 | Heating technology for malignant tumors: a review. International Journal of Hyperthermia, 2020, 37, 711-741. | 1.1 | 211 |
| 7 | Colloid stability: The forces between charged surfaces in an electrolyte. Journal of Chemical Physics, 1991, 95, 520-532. | 1.2 | 198 |
| 8 | Development of Tumor Targeting Bioprobes (111In-Chimeric L6 Monoclonal Antibody Nanoparticles) for Alternating Magnetic Field Cancer Therapy. Clinical Cancer Research, 2005, 11, 7087s-7092s. | 3.2 | 183 |
| 9 | Application of High Amplitude Alternating Magnetic Fields for Heat Induction of Nanoparticles Localized in Cancer. Clinical Cancer Research, 2005, 11, 7093s-7103s. | 3.2 | 166 |
| 10 | Synthesis and antibody conjugation of magnetic nanoparticles with improved specific power absorption rates for alternating magnetic field cancer therapy. Journal of Magnetism and Magnetic Materials, 2007, 311, 181-186. | 1.0 | 133 |
| 11 | Magnetic nanoparticle heating efficiency reveals magneto-structural differences when characterized with wide ranging and high amplitude alternating magnetic fields. Journal of Applied Physics, 2011, 109, . | 1.1 | 131 |
| 12 | Size Invariance of Polyelectrolyte Dendrimers. Macromolecules, 2000, 33, 4172-4176. | 2.2 | 121 |
| 13 | Nanoparticle interactions with immune cells dominate tumor retention and induce T cellâ€"mediated tumor suppression in models of breast cancer. Science Advances, 2020, 6, eaay1601. | 4.7 | 107 |
| 14 | Magnetic nanoparticle hyperthermia enhances radiation therapy: A study in mouse models of human prostate cancer. International Journal of Hyperthermia, 2015, 31, 359-374. | 1.1 | 106 |
| 15 | Internal Magnetic Structure of Nanoparticles Dominates Timeâ€Đependent Relaxation Processes in a Magnetic Field. Advanced Functional Materials, 2015, 25, 4300-4311. | 7.8 | 100 |
| 16 | NanoFerrite Particle Based Radioimmunonanoparticles: Binding Affinity and In Vivo Pharmacokinetics. Bioconjugate Chemistry, 2008, 19, 1211-1218. | 1.8 | 99 |
| 17 | Electrochemical and Neutron Reflectivity Characterization of Dodecyl Sulfate Adsorption and Aggregation at the Goldâ^'Water Interface. Langmuir, 2001, 17, 3355-3367. | 1.6 | 96 |
| 18 | The influence of collective behavior on the magnetic and heating properties of iron oxide nanoparticles. Journal of Applied Physics, 2008, 103, . | 1.1 | 89 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Magnetic nanoparticle biodistribution following intratumoral administration. Nanotechnology, 2011, 22, 345101. | 1.3 | 88 |
| 20 | Thermal dosimetry predictive of efficacy of 111In-ChL6 nanoparticle AMF--induced thermoablative therapy for human breast cancer in mice. Journal of Nuclear Medicine, 2007, 48, 437-44. | 2.8 | 75 |
| 21 | Preliminary study of injury from heating systemically delivered, nontargeted dextranâ€“superparamagnetic iron oxide nanoparticles in mice. Nanomedicine, 2012, 7, 1697-1711. | 1.7 | 71 |
| 22 | Magnetic resonance imaging contrast of iron oxide nanoparticles developed for hyperthermia is dominated by iron content. International Journal of Hyperthermia, 2014, 30, 192-200. | 1.1 | 69 |
| 23 | The influence of magnetic and physiological behaviour on the effectiveness of iron oxide nanoparticles for hyperthermia. Journal Physics D: Applied Physics, 2008, 41, 134020. | 1.3 | 65 |
| 24 | Modified Solenoid Coil That Efficiently Produces High Amplitude AC Magnetic Fields With Enhanced Uniformity for Biomedical Applications. IEEE Transactions on Magnetics, 2012, 48, 47-52. | 1.2 | 64 |
| 25 | Experimental estimation and analysis of variance of the measured loss power of magnetic nanoparticles. Scientific Reports, 2017, 7, 6661. | 1.6 | 64 |
| 26 | Structure of Charged Dendrimer Solutions As Seen by Small-Angle Neutron Scattering. Macromolecules, 1999, 32, 5895-5900. | 2.2 | 54 |
| 27 | Physical characterization and in vivo organ distribution of coated iron oxide nanoparticles. Scientific Reports, 2018, 8, 4916. | 1.6 | 50 |
| 28 | Magnetic nanoparticle hyperthermia: A new frontier in biology and medicine?. International Journal of Hyperthermia, 2013, 29, 703-705. | 1.1 | 45 |
| 29 | Adsorption of Poly(styrenesulfonate) to the Air Surface of Water by Neutron Reflectivity. Macromolecules, 2000, 33, 6126-6133. | 2.2 | 44 |
| 30 | Effect of Solvent Flow on a Polymer Brush:â€‰ A Neutron Reflectivity Study of the Brush Height and Chain Density Profile. Langmuir, 2001, 17, 2999-3005. | 1.6 | 44 |
| 31 | The effect of cell cluster size on intracellular nanoparticle-mediated hyperthermia: is it possible to treat microscopic tumors?. Nanomedicine, 2013, 8, 29-41. | 1.7 | 44 |
| 32 | Adsorption of Sodium Poly(styrenesulfonate) to the Air Surface of Water by Neutron and X-ray Reflectivity and Surface Tension Measurements:â€‰ Polymer Concentration Dependence. Macromolecules, 2002, 35, 9737-9747. | 2.2 | 42 |
| 33 | Structure within Thin Epoxy Films Revealed by Solvent Swelling:â€‰ A Neutron Reflectivity Study. Macromolecules, 1999, 32, 7932-7938. | 2.2 | 40 |
| 34 | Adsorption of Lysozyme onto the Silicon Oxide Surface Chemically Grafted with a Monolayer of Pentadecyl-1-ol. Langmuir, 2000, 16, 4999-5007. | 1.6 | 40 |
| 35 | An optimised spectrophotometric assay for convenient and accurate quantitation of intracellular iron from iron oxide nanoparticles. International Journal of Hyperthermia, 2018, 34, 373-381. | 1.1 | 38 |
| 36 | Temperature-controlled power modulation compensates for heterogeneous nanoparticle distributions: a computational optimization analysis for magnetic hyperthermia. International Journal of Hyperthermia, 2019, 36, 115-129. | 1.1 | 36 |

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|---|---|---|---|
| 37 | Evaluation of a PSMA-targeted BNF nanoparticle construct. Nanoscale, 2015, 7, 4432-4442. | 2.8 | 35 |
| 38 | Enhancing the abscopal effect of radiation and immune checkpoint inhibitor therapies with magnetic nanoparticle hyperthermia in a model of metastatic breast cancer. International Journal of Hyperthermia, 2019, 36, 47-63. | 1.1 | 35 |
| 39 | Clinical magnetic hyperthermia requires integrated magnetic particle imaging. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2022, 14, e1779. | 3.3 | 34 |
| 40 | The magnitude and time-dependence of the apoptotic response of normal and malignant cells subjected to ionizing radiation versus hyperthermia. International Journal of Radiation Biology, 2006, 82, 549-559. | 1.0 | 32 |
| 41 | Electrochemical and Neutron Reflectivity Studies of Spontaneously Formed Amphiphilic Surfactant Bilayers at the Goldâ˜'Solution Interface. Langmuir, 2000, 16, 9861-9870. | 1.6 | 30 |
| 42 | Neutron Reflectivity of Linearâ˜'Dendritic Diblock Copolymer Monolayers. Macromolecules, 2002, 35, 231-238. | 2.2 | 30 |
| 43 | Enhanced magnetic properties and MRI performance of bi-magnetic coreâ€"shell nanoparticles. RSC Advances, 2016, 6, 77558-77568. | 1.7 | 30 |
| 44 | Characterization of intratumor magnetic nanoparticle distribution and heating in a rat model of metastatic spine disease. Journal of Neurosurgery: Spine, 2014, 20, 740-750. | 0.9 | 27 |
| 45 | Magnetic nanoparticle hyperthermia for treating locally advanced unresectable and borderline resectable pancreatic cancers: the role of tumor size and eddy-current heating. International Journal of Hyperthermia, 2020, 37, 108-119. | 1.1 | 27 |
| 46 | Development and Screening of a Series of Antibodyâ€Conjugated and Silicaâ€Coated Iron Oxide Nanoparticles for Targeting the Prostateâ€Specific Membrane Antigen. ChemMedChem, 2014, 9, 1356-1360. | 1.6 | 25 |
| 47 | ROS-induced HepG2 cell death from hyperthermia using magnetic hydroxyapatite nanoparticles. Nanotechnology, 2018, 29, 375101. | 1.3 | 24 |
| 48 | Method to reduce non-specific tissue heating of small animals in solenoid coils. International Journal of Hyperthermia, 2013, 29, 106-120. | 1.1 | 22 |
| 49 | Image-guided thermal therapy with a dual-contrast magnetic nanoparticle formulation: A feasibility study. International Journal of Hyperthermia, 2016, 32, 543-557. | 1.1 | 20 |
| 50 | Increased uptake of doxorubicin by cells undergoing heat stress does not explain its synergistic cytotoxicity with hyperthermia. International Journal of Hyperthermia, 2019, 36, 711-719. | 1.1 | 20 |
| 51 | Internal magnetic structure of dextran coated magnetite nanoparticles in solution using small angle neutron scattering with polarization analysis. Journal of Applied Physics, 2011, 109, 07B513. | 1.1 | 19 |
| 52 | Computational evaluation of amplitude modulation for enhanced magnetic nanoparticle hyperthermia. Biomedizinische Technik, 2015, 60, 491-504. | 0.9 | 19 |
| 53 | Nanoparticle architecture preserves magnetic properties during coating to enable robust multi-modal functionality. Scientific Reports, 2018, 8, 12706. | 1.6 | 18 |
| 54 | Design and construction of a Maxwell-type induction coil for magnetic nanoparticle hyperthermia. International Journal of Hyperthermia, 2020, 37, 1-14. | 1.1 | 18 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 55 | The polymerization of actin: Structural changes from small-angle neutron scattering. Journal of Chemical Physics, 2005, 123, 154904. | 1.2 | 15 |
| 56 | Calibration of a Quasi-Adiabatic Magneto-Thermal Calorimeter Used to Characterize Magnetic Nanoparticle Heating. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, . | 0.8 | 15 |
| 57 | Monitoring nanoparticle-mediated cellular hyperthermia with a high-sensitivity biosensor. Nanomedicine, 2014, 9, 2729-2743. | 1.7 | 15 |
| 58 | <i>Short Communication:</i> Nanoparticle Thermotherapy and External Beam Radiation Therapy for Human Prostate Cancer Cells. Cancer Biotherapy and Radiopharmaceuticals, 2008, 23, 265-271. | 0.7 | 14 |
| 59 | The polymerization of actin: Study by small angle neutron scattering. Journal of Chemical Physics, 1998, 108, 5599-5607. | 1.2 | 13 |
| 60 | The impact of data selection and fitting on SAR estimation for magnetic nanoparticle heating. International Journal of Hyperthermia, 2020, 37, 100-107. | 1.1 | 13 |
| 61 | Validation of a coupled electromagnetic and thermal model for estimating temperatures during magnetic nanoparticle hyperthermia. International Journal of Hyperthermia, 2021, 38, 611-622. | 1.1 | 12 |
| 62 | The Effects of Temperature and Methanol Concentration on the Properties of Poly(N-isopropylacrylamide) at the Air/Solution Interface. Langmuir, 2001, 17, 5118-5120. | 1.6 | 11 |
| 63 | New iron-oxide particles for magnetic nanoparticle hyperthermia: an<i>in-vitro</i>and<i>in-vivo</i>pilot study. Proceedings of SPIE, 2013, , . | 0.8 | 11 |
| 64 | Inelastic Neutron Scattering from Filled Elastomers. Rubber Chemistry and Technology, 2000, 73, 847-863. | 0.6 | 10 |
| 65 | Pathways to chromothripsis. Cell Cycle, 2015, 14, 2886-2890. | 1.3 | 10 |
| 66 | Magnetic field generating inductor for cancer hyperthermia research. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1626-1636. | 0.5 | 9 |
| 67 | Low-Dose CT Perfusion of the Liver Using Reconstruction of Difference. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 205-214. | 2.7 | 9 |
| 68 | Systemically delivered antibody-labeled magnetic iron oxide nanoparticles are less toxic than plain nanoparticles when activated by alternating magnetic fields. International Journal of Hyperthermia, 2020, 37, 59-75. | 1.1 | 4 |
| 69 | Bubble Magnetometry of Nanoparticle Heterogeneity and Interaction. Physical Review Applied, 2019, 11, . | 1.5 | 1 |
| 70 | Magnet-assisted Flow Cytometry of in vivo Tumors to Quantitate Cell-specific Responses to Magnetic Iron Oxide Nanoparticles. Bio-protocol, 2020, 10, e3822. | 0.2 | 1 |
| 71 | Bionized Nanoferrite Particles Alter the Course of Experimental Cryptococcus neoformans Pneumonia. Antimicrobial Agents and Chemotherapy, 2022, 66, e0239921. | 1.4 | 1 |
| 72 | Small-Angle Neutron Scattering of Bilayer Vesicles Made with Synthetic Phospholipids. Materials Research Society Symposia Proceedings, 1998, 550, 83. | 0.1 | 0 |

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| 73 | Neutron Reflectivity from the Monolayer of SAN Random Copolymer. Molecular Crystals and Liquid Crystals, 2001, 371, 211-214. | 0.3 | 0 |
| 74 | Nanoparticle Redistribution During Magnetic Nanoparticle Hyperthermia: Multi-Physics Porous Medium Model Analyses. , 2012, , . | | 0 |
| 75 | EXTH-69. MAGNETIC HYPERTHERMIA THERAPY OF EXPERIMENTAL GLIOBLASTOMA IN COMBINATION WITH CHEMORADIATION. Neuro-Oncology, 2018, 20, vi99-vi100. | 0.6 | 0 |
| 76 | For HIPEC, synergistic effects of hyperthermia and doxorubicin are optimal when simultaneously combined. International Journal of Hyperthermia, 2020, 37, 346-348. | 1.1 | 0 |
| 77 | Computational Histopathological Analysis of Nanoparticle Distribution in Breast Cancer Models. FASEB Journal, 2018, 32, lb558. | 0.2 | 0 |