Image-Guided & Functionally Instructed Tumor Therapies
Cluster of Excellence

iFIT publications

Visualizing and Targeting Cancer Stress

issue 03 | August 2022

This third issue shows all **102 iFIT-related publications** from **June 2021** to **July 2022**.

The list is sorted by iFIT research area and last name of first author.

iFIT partners are marked in bold, titles in red. The list is accompanied by **statistics on impact factors** and **number of publications per area**.

Publications with the highest IF (>15) are highlighted ⚑.

● Area A | **FIMT** – Functionally Instructed Molecular Therapies

Abdelmalek, C. M., […], **Kronenberger, T.**, […], **Gehringer, M.**, **Zender, L.**, […], Laufer SA. (2022). "Gefitinib-Tamoxifen Hybrid Ligands as Potent Agents against Triple-Negative Breast Cancer." J Med Chem 65(6): 4616-4632.

Almeida, T., […], **Schwab, M.**, **Brauch, H.**, […], Casali-da-Rocha, JC. (2022). "(Z)-Endoxifen and Early Recurrence of Breast Cancer: An Explorative Analysis in a Prospective Brazilian Study." J Pers Med 12(4).

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Gurgen, D., […], **Schäffeler, E.**, […], **Schwab M.**, […], Hoffmann J. (2022). "A Molecularly Characterized Preclinical Platform of Subcutaneous Renal Cell Carcinoma (RCC) Patient-Derived Xenograft Models to Evaluate Novel Treatment Strategies." Front Oncol 12: 889789.

Hirte, S., […], **Schwab, M.**, […], Kirchmair, J. (2022). "Development and Experimental Validation of Regularized Machine Learning Models Detecting New, Structurally Distinct Activators of PXR." Cells 11(8).

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Pillaiyar, T., […], **Kronenberger, T.**, […], **Poso, A.**, […], **Laufer, S.A.** (2022). "Small-Molecule Thioesters as SARS-CoV-2 Main Protease Inhibitors: Enzyme Inhibition, Structure-Activity Relationships, Antiviral Activity, and X-ray Structure Determination." J Med Chem 65(13): 9376-9395.

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Serafim, R. A. M., […], **Zender, L.**, […], **Laufer, S.A.**, […], **Gehringer, M.** (2022). "Development of the First Covalent Monopolar Spindle Kinase 1 (MPS1/TTK) Inhibitor." J Med Chem 65(4): 3173-3192.

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● Area B | ImmT – Immunotherapy

Aung, T. N., […], **Sinnberg, T.**, **Amaral, T.**, […], Rimm, DL. (2022). "Objective assessment of tumor infiltrating lymphocytes as a prognostic marker in melanoma using machine learning algorithms." EBioMedicine 82: 104143.

Chashchina, A., […], Hinterleitner, C., […], **Salih, H.R.**, […], **Klimovich, B.** (2021). "DNAM-1/CD226 is functionally expressed on acute myeloid leukemia (AML) cells and is associated with favorable prognosis." Sci Rep 11(1): 18012.

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Gaißler, A., […], **Amaral, T.**, […], **Garbe, C.**, […], Wistuba-Hamprecht, K. (2022). "Dynamics of Melanoma-Associated Epitope-Specific CD8+ T Cells in the Blood Correlate With Clinical Outcome Under PD-1 Blockade." Front Immunol. 13:906352.

Greiner, S. M., […], Hinterleitner, C., […], **Jung, G.**, **Salih, H.R.**, […], Kauer, J. (2022). "Identification of CD105 (endoglin) as novel risk marker in CLL." Ann Hematol 101(4): 773-780.

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Kazmierski, J., […], **Löffler, M.W.**, **Weber, A.N.R.**, […], Goffinet, C. (2022). "A Baseline Cellular Antiviral State Is Maintained by cGAS and Its Most Frequent Naturally Occurring Variant rs610913." J Immunol ji2100685.

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Lutz, M. S., **Klimovich, B.**, […], Zekri, L., **Jung, G.**, **Salih, H.R.**, Hinterleitner, C. (2022). "Platelets subvert antitumor efficacy of T cell-recruiting bispecific antibodies." J Immunother Cancer 10(2).

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Area C | MFMI – Molecular and Functional Multiparametric Imaging

Armento, A., […], Marzi, J., […], **Schenke-Layland, K.**, […], Ueffing, M. (2021). "Complement Factor H Loss in RPE Cells Causes Retinal Degeneration in a Human RPE-Porcine Retinal Explant Co-Culture Model." Biomolecules 11(11).

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● **FIMT/ImmT** – Functionally Instructed Molecular Therapies & Immunotherapy

Bochem, J., […], **Amaral, T.**, […], **Sinnberg, T.**, **Niessner, H.**, […], **Königsrainer, A.**, **Garbe, C.**, […], **Löffler M.W.**, […], Wistuba-Hamprecht, K. (2021). "Early disappearance of tumor antigen-reactive T cells from peripheral blood correlates with superior clinical outcomes in melanoma under anti-PD-1 therapy." J Immunother Cancer 9(12).

Brake, L., **Löffler, M.W.**, […], **Königsrainer, A.**, Quante, M. (2021). "[SARS-CoV-2 Infections and Clinical Consequences in a Cohort of Solid Organ Transplant Recipients during the first Wave in Germany - a Single Centre Survey and a Case Report]." Zentralbl Chir 146(6): 597-604.

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● FIMT/MFMI – Functionally Instructed Molecular Therapies & Molecular and Functional Multiparametric Imaging

Becker, L., […], **Nies A.T.**, **Schenke-Layland, K.**, Marzi, J. (2021). "Raman Imaging and Fluorescence Lifetime Imaging Microscopy for Diagnosis of Cancer State and Metabolic Monitoring." Cancers (Basel) 13(22).

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Montes-Mojarro, I. A., […], **Schäffeler, E.**, **Pichler, B.J.**, **Schwab, M.**, […], **Quintanilla-Martinez, L.** (2022). "CD147 a direct target of miR-146a supports energy metabolism and promotes tumor growth in ALK+ ALCL." Leukemia.

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📖**IF 17,694** Stotz, S., […], **Nies A.T.**, **Schwab, M.**, **Maurer, A.** (2022). "Two experts and a newbie: [(18)F]PARPi vs [(18)F]FTT vs [(18)F]FPyPARP-a comparison of PARP imaging agents." Eur J Nucl Med Mol Imaging 49(3): 834-846.

● ImmT/MFMI – Immunotherapy & Molecular and Functional Multiparametric Imaging

📖**IF 17,694** Becker, M., […], **Rammensee, H.G.**, **Schenke-Layland, K.**, Nelde, A., Märklin, M., […], **Walz, J.S.**, […], Rothbauer, U., […], Schneiderhan-Marra, N. (2021). "Exploring beyond clinical routine SARS-CoV-2 serology using MultiCoV-Ab to evaluate endemic coronavirus cross-reactivity." Nat Commun 12(1): 1152.

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● FIMT/ImmT/MFMI – Functionally Instructed Molecular Therapies & Immunotherapy & Molecular and Functional Multiparametric Imaging

📖**IF 17,694** Hinterleitner, C., […], Henning, M., […], **Walz J.S.**, […], **Seitz, C.M.**, **Weigelin, B.**, **Singer, S.**, **Salih, H.R.**, […], **Zender, L.** (2021). "Platelet PD-L1 reflects collective intratumoral PD-L1 expression and predicts immunotherapy response in non-small cell lung cancer." Nat Commun 12(1): 7005.

Highlighted Publications with Impact Factor >15

IF 69,800 Li, X., […], **Zender, L.**, Heikenwalder, M. (2021). "The immunological and metabolic landscape in primary and metastatic liver cancer." Nat Rev Cancer 21(9): 541-557.

IF 69,504 Calvanese, V., […], **Schenke-Layland, K.**, Mikkola, HKA. (2022). "Mapping human haematopoietic stem cells from haemogenic endothelium to birth." Nature 604(7906): 534-540.

IF 69,504 Heitmann, J. S., […], **Rammensee, H.G.**, **Salih, H.R.**, **Walz, J.S.** "A COVID-19 peptide vaccine for the induction of SARS-CoV-2 T cell immunity." Nature 601(7894): 617-622.

IF 68,164 Reautschnig, P., […], Kang, T.W., […], **Zender, L.**, […], Stafforst, T. (2022). "CLUSTER guide RNAs enable precise and efficient RNA editing with endogenous ADAR enzymes in vivo." Nat Biotechnol 40(5): 759-768.

IF 68,164 Sanchez-Rivera, F. J., […], **Leibold, J.**, […], Dow, LE. (2022). "Base editing sensor libraries for high-throughput engineering and functional analysis of cancer-associated single nucleotide variants." Nat Biotechnol 40(6): 862-873.

IF 38,272 van Tilburg, C. M., […], **Schwab, M.**, […], Witt, O. (2021). "The Pediatric Precision Oncology INFORM Registry: Clinical Outcome and Benefit for Patients with Very High-Evidence Targets." Cancer Discov 11(11): 2764-2779.

IF 17,873 Urbanczyk, M., […], **Schenke-Layland, K.** (2022). "Organ-specific endothelial cell heterogenicity and its impact on regenerative medicine and biomedical engineering applications." Adv Drug Deliv Rev 186: 114323.

IF 17,694 Becker, M., […], **Rammensee, H.G.**, **Schenke-Layland, K.**, Nelde, A., Märklin, M., […], **Walz, J.S.**, […], **Rothbauer, U.**, […], Schneiderhan-Marra, N. (2021). "Exploring beyond clinical routine SARS-CoV-2 serology using MultiCoV-Ab to evaluate endemic coronavirus cross-reactivity." Nat Commun 12(1): 1152.

IF 17,694 Hinterleitner, C., […], Henning, M., […], **Walz J.S.**, […], **Seitz, C.M.**, **Weigelin, B.**, **Singer, S.**, **Salih, H.R.**, […], **Zender, L.** (2021). "Platelet PD-L1 reflects collective intratumoral PD-L1 expression and predicts immunotherapy response in non-small cell lung cancer." Nat Commun 12(1): 7005.

IF 17,694 Pantsar, T., […], Forster, M., **Rothbauer, U.**, **Laufer, S.A.** (2022). "Decisive role of water and protein dynamics in residence time of p38alpha MAP kinase inhibitors." Nat Commun 13(1): 569.

IF 17,694 **Weigelin, B.**, […], Friedl, P. (2021). "Cytotoxic T cells are able to efficiently eliminate cancer cells by additive cytotoxicity." Nat Commun 12(1): 5217.

Statistics

Number of publications per area in this issue

FIMT –
Functionally Instructed
Molecular Therapies

ImmT –
Immunotherapy

MFMI –
Molecular and Functional
Multiparametric Imaging
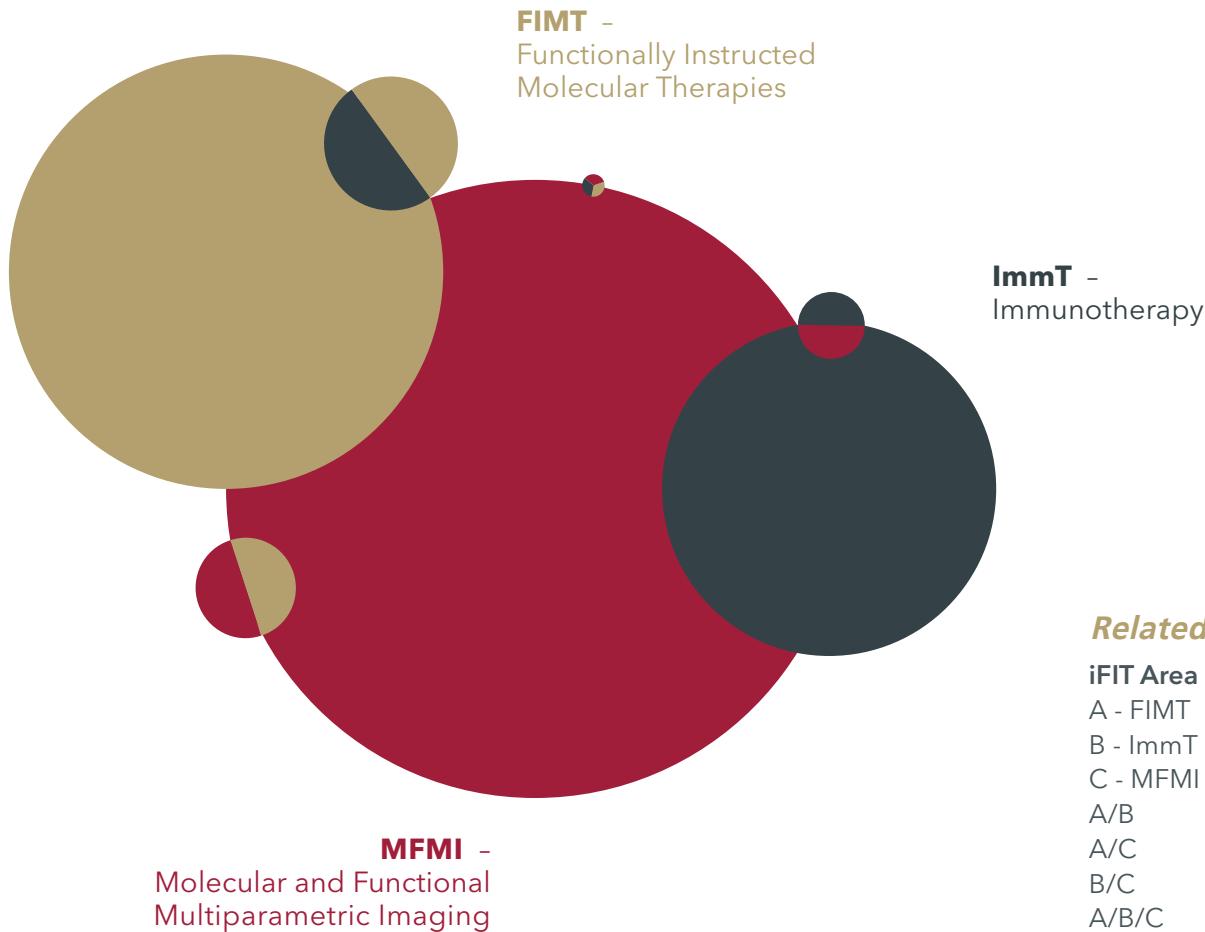
Related Data for this issue

iFIT Area	# of publ.
A - FIMT	26
B - ImmT	20
C - MFMI	37
A/B	8
A/C	6
B/C	4
A/B/C	1

Overall statistics 2019 to 07/2022

	2019	2020	2021	01-07/2022	2019-07/2022
A - FIMT	6	30	27	21	**84**
B - ImmT	5	19	25	11	**60**
C - MFMI	6	29	35	19	**89**
A/B	2	6	12	4	**24**
A/C	0	0	3	4	**7**
B/C	2	4	5	2	**13**
A/B/C	0	1	4	0	**5**
Total Publications	**21**	**89**	**111**	**61**	**282**
iFIT Cumulative IF	317,26	1026,53	1397,68	617,78	3359,25
iFIT Median CIF	15,11	11,53	12,59	10,13	11,91

Image-Guided and Functionally Instructed Tumor Therapies
Cluster of Excellence

iFIT
Visualizing and Targeting Cancer Stress

Impact Factors

IF per Journal & Number of iFIT-related Publications | IF >5

Journal	Publications	Impact Factor
NATURE REVIEWS CANCER	1	69,800
NATURE	2	69,504
NATURE BIOTECHNOLOGY	2	68,164
CANCER DISCOVERY	1	38,272
ADVANCED DRUG DELIVERY REVIEWS	1	17,873
NATURE COMMUNICATIONS	4	17,694
NPJ REGENERATIVE MEDICINE	1	14,404
LEUKEMIA	1	12,897
JOURNAL FOR IMMUNOTHERAPY OF CANCER	3	12,487
CANCER IMMUNOLOGY RESEARCH	1	12,02
EBioMEDICINE	1	11,205
ADVANCED HEALTHCARE MATERIALS	1	11,092
JOURNAL OF NUCLEAR MEDICINE	3	11,082
ACTA BIOMATERIALIA	3	10,633
EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING	1	10,057
CELL DEATH & DISEASE	1	9,705
ACS APPLIED MATERIALS AND INTERFACES	1	9,229
EMBO REPORTS	1	9,071
CURRENT OPINION IN CHEMICAL BIOLOGY	1	8,972
JOURNAL OF MEDICINAL CHEMISTRY	7	8,039
CELLS	3	7,666
BLOOD ADVANCES	2	7,647
JOURNAL OF INVESTIGATIVE DERMATOLOGY	1	7,590
FRONTIERS IN IMMUNOLOGY	2	7,561
NPJ BREAST CANCER	1	7,519
MOLECULAR & CELLULAR PROTEOMICS	1	7,381
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY	2	7,088
RHEUMATHOLOGY	1	7,046
JOURNAL OF CEREBRAL BLOOD FLOW & METABOLISM	1	6,960
CLINICAL PHARMACOLOGY & THERAPEUTICS	1	6,903
RADIOTHERAPY AND ONCOLOGY	1	6,901
NUTRIENTS	1	6,706
EUROPEAN JOURNAL OF IMMUNOLOGY	1	6,688
CANCERS	11	6,575
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	1	6,208
COMPUTATIONAL AND STRUCTURAL BIOTECHNOLOGY JOURNAL	1	6,155
JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM	1	6,134
iSCIENCE	1	6,107
BIOMOLECULES	1	6,064
MOLECULAR CANCER THERAPEUTICS	1	6,009
FRONTIERS IN CARDIOVASCULAR MEDICINE	1	5,846
FRONTIERS IN ONCOLOGY	3	5,738
ADVANCES IN PROTEIN CHEMISTRY AND STRUCTURAL BIOLOGY	1	5,447
JOURNAL OF IMMUNOLOGY	1	5,446
JOURNAL DER DEUTSCHEN DERMATOLOGISCHEN GESELLSCHAFT	1	5,231
PHARMACEUTICALS	2	5,215

■ Impact Factor per journal (2021)

■ Number of iFIT publications per journal

Formalities

Disclosure note

The iFIT research is translational, both preclinical and clinical but also across disciplines. The **Covid pandemic** made clear that **mRNA vaccination**, which was originally developed for tumor vaccination, paved the way out of this world-wide problematic situation. Moreover, current iFIT research toward **peptide tumor vaccination** has been translated by iFIT researchers and contributes to a **clinical trial of Covid vaccinations** specifically for **cancer patients** with a **suppressed immune system**.

Mandatory Requirements for iFIT Publications

Regardless of the language of the publication and according to the **DFG's requirements**, it is mandatory to use the exact provided wording for the **affiliation and acknowledgment**. The DFG searches for publications solely with the help of these phrases. Therefore, if the wording is not respected, the publication will not be found and will not count for the Cluster's achievements.

GERMAN acknowledgement
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EXC 2180 - 390900677

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iFIT AFFILIATION
Cluster of Excellence iFIT (EXC 2180) "Image-Guided and Functionally Instructed Tumor Therapies", University of Tuebingen, Germany

Collection & Sorting of Data

Publications included into this list were collected by requesting a regular update on most recent publication from all iFIT Principal Investigators and Associate Investigators. Moreover, the iFIT office is regularly searching at the PubMed (https://pubmed.ncbi.nlm.nih.gov/) for all papers with an "iFIT" or "EXC 2180" acknowledgement. This implies that only papers with the iFIT acknowledgement and/or affiliation can be considered.

Papers are associated to an iFIT area according to the area of the iFIT PIs/AIs shown as authors and marked in bold – regardless of their position in the list of authors. Each iFIT PI/AI is associated with (at least) one iFIT area:

A | **FIMT –** Functionally Instructed Molecular Therapies
B | **ImmT** – Immunotherapy
C | **MFMI** – Molecular and Functional Multiparametric Imaging

Information about the Impact Factors is obtained on the website https://jcr.clarivate.com.

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