

## Literaturverzeichnis für Röntgenemission bei UKP-basiertem Materialabt

#	Jahr	Referenz	Link	DOI
1	2004	J. Bunte, S. Barcikowski, T. Püster, T. Burmester, M. Brose, T. Ludwig, "Secondary hazards: particle and X-ray emission", <i>Top. Appl. Phys.</i> 96, 309 (2004)	<a href="https://doi.org/10.1007/978-3-540-39848-6_20">https://doi.org/10.1007/978-3-540-39848-6_20</a>	10.1007/978-3-540-39848-6_20
2	2011	W. Hu, "Effect of air breakdown with a focusing lens on ultrashort laser ablation", <i>Appl. Phys. Lett.</i> 99, 234104 (2011)	<a href="https://doi.org/10.1063/1.3665631">https://doi.org/10.1063/1.3665631</a>	10.1063/1.3665631
3	2014	J. Weisshaupt et al., "High-brightness table-top hard X-ray source driven by sub-100-femtosecond mid-infrared pulses", <i>Nature Photon</i> 8, 927 (2014)	<a href="https://doi.org/10.1038/nphoton.2014.256">https://doi.org/10.1038/nphoton.2014.256</a>	10.1038/nphoton.2014.256
4	2018	H. Legall et al., "X-ray emission as a potential hazard during ultrashort pulse laser material processing", <i>Appl. Phys. A</i> 124, 407 (2018)	<a href="https://doi.org/10.1007/s00339-018-1828-6">https://doi.org/10.1007/s00339-018-1828-6</a>	10.1007/s00339-018-1828-6
5	2019	R. Behrens et al., "X-RAY EMISSION FROM MATERIALS PROCESSING LASERS", <i>Radiat. Prot. Dosim.</i> 183, 361–374 (2019)	<a href="https://doi.org/10.1093/rpd/ncy126">https://doi.org/10.1093/rpd/ncy126</a>	10.1093/rpd/ncy126
6	2019	R. Weber et al., "Expected X-ray dose rates resulting from industrial ultrafast laser applications", <i>Appl. Phys. A</i> 125, 635 (2019)	<a href="https://doi.org/10.1007/s00339-019-2885-1">https://doi.org/10.1007/s00339-019-2885-1</a>	10.1007/s00339-019-2885-1
7	2019	H. Legall et al., "The influence of processing parameters on X-ray emission during ultra-short pulse laser machining", <i>Appl. Phys. A</i> 125, 570 (2019)	<a href="https://doi.org/10.1007/s00339-019-2827-y">https://doi.org/10.1007/s00339-019-2827-y</a>	10.1007/s00339-019-2827-y
8	2019	H. Legall et al., "X-ray emission during ultrashort pulse laser processing", <i>Proc. SPIE</i> 10908, 1090802 (2019)	<a href="https://doi.org/10.1117/12.2516165">https://doi.org/10.1117/12.2516165</a>	10.1117/12.2516165
9	2020	H. Legall et al., "X-ray radiation protection aspects during ultrashort laser processing", <i>J. Laser Appl.</i> 32, 022004 (2020)	<a href="https://doi.org/10.2351/1.5134778">https://doi.org/10.2351/1.5134778</a>	10.2351/1.5134778
10	2020	C. Freitag and R. Giedl-Wagner, "X-Ray Protection in an Industrial Production Environment", <i>PhotonicsViews</i> 17, 37 (2020)	<a href="https://doi.org/10.1002/phvs.202000020">https://doi.org/10.1002/phvs.202000020</a>	10.1002/phvs.202000020
11	2021	P. Mosel et al., "X-ray Dose Rate and Spectral Measurements during Ultrafast Laser Machining Using a Calibrated (High-Sensitivity) Novel X-ray Detector", <i>Materials</i> 14, 4397 (2021)	<a href="https://doi.org/10.3390/ma14164397">https://doi.org/10.3390/ma14164397</a>	10.3390/ma14164397
12	2021	J. Schille et al., "Study on X-ray Emission Using Ultrashort Pulsed Lasers in Materials Processing", <i>Materials</i> 14, 4537 (2021)	<a href="https://doi.org/10.3390/ma14164537">https://doi.org/10.3390/ma14164537</a>	10.3390/ma14164537
13	2021	D. Metzner et al., "X-ray generation by laser ablation using MHz to GHz pulse bursts", <i>J. Laser Appl.</i> 33, 032014 (2021)	<a href="https://doi.org/10.2351/7.0000403">https://doi.org/10.2351/7.0000403</a>	10.2351/7.0000403
14	2021	U. Stolzenberg et al., "X-ray Emission Hazards from Ultrashort Pulsed Laser Material Processing in an Industrial Setting", <i>Materials</i> 14, 7163 (2021)	<a href="https://doi.org/10.3390/ma14237163">https://doi.org/10.3390/ma14237163</a>	10.3390/ma14237163
15	2021	H. Legall et al., "Review of x-ray exposure and safety issues arising from ultra-short pulse laser material processing", <i>J. Radiol. Prot.</i> 41 (2021)	<a href="https://doi.org/10.1088/1361-6498/abcb16">https://doi.org/10.1088/1361-6498/abcb16</a>	10.1088/1361-6498/abcb16
16	2021	L. Gemini et al., "Ablation of Bone Tissue by Femtosecond Laser: A Path to High-Resolution Bone Surgery", <i>Materials</i> 14, 2429 (2021)	<a href="https://doi.org/10.3390/ma14092429">https://doi.org/10.3390/ma14092429</a>	10.3390/ma14092429
17	2021	G. Dittmar und J. Nolting, "Aus der Praxis: Überwachung der Röntgenemission bei Ultrakurzpuls-Lasern", <i>sicher ist sicher</i> 07/08, 348 (2021)	<a href="https://doi.org/10.37307/j.2199-7349.2021.07.07">https://doi.org/10.37307/j.2199-7349.2021.07.07</a>	10.37307/j.2199-7349.2021.07.07
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19	2021	J. Schille and U. Loeschner, "Ultrashort pulse lasers in high-rate laser micro processing – Quo vadis?", <i>Adv. Opt. Techn.</i> 10, 233–237 (2021)	<a href="https://doi.org/10.1515/aot-2021-0049">https://doi.org/10.1515/aot-2021-0049</a>	10.1515/aot-2021-0049
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21	2021	R. Giedl-Wagner, "Sicherer Betrieb von industriellen UKP-Laser-Anlagen - trotz ionisierender Strahlung!", <i>StrahlenschutzPRAXIS</i> 2, 17 (2021)		na
22	2021	R. Weber, "Neue Anwendungen von Technik im Bereich der ionisierenden und nichtionisierenden Strahlung - moderne Laser in der Praxis", <i>StrahlenschutzPRAXIS</i> 2, 5 (2021)		na
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25	2022	J. Holland, R. Weber, M. Sailer, T. Graf, "Influence of Pulse Duration on X-ray Emission during Industrial Ultrafast Laser Processing", <i>Materials</i> 15, 2257 (2022)	<a href="https://doi.org/10.3390/ma15062257">https://doi.org/10.3390/ma15062257</a>	10.3390/ma15062257
26	2022	G. Dittmar und J. Nolting, "Prüfung von Lasern auf Emission von Röntgenstrahlung bei der Bearbeitung von Werkstücken", <i>sicher ist sicher</i> 07/08, 313 (2022)	<a href="https://doi.org/10.37307/j.2199-7349.2022.07.07">https://doi.org/10.37307/j.2199-7349.2022.07.07</a>	10.37307/j.2199-7349.2022.07.07
27	2022	V. Barkauskas et al., "Prediction of the irradiation doses from ultrashort laser-solid interactions using different temperature scalings at moderate laser intensities", <i>J Radiol Prot.</i> 12, 42 (2022)	<a href="https://doi.org/10.1088/1361-6498/ac44fb">https://doi.org/10.1088/1361-6498/ac44fb</a>	10.1088/1361-6498/ac44fb
28	2022	Jan Rucker et al., "Unwanted x-ray emission during ultra-short pulse laser material processing and the influence of processing parameters", <i>Procedia CIRP</i> 111, 850 (2022)	<a href="https://doi.org/10.1016/j.procir.2022.08.096">https://doi.org/10.1016/j.procir.2022.08.096</a>	10.1016/j.procir.2022.08.096
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30	2023	R. Giedl-Wagner et al., "X-ray emissions during laser machining of cylindrical micro-components", <i>PhotonicsViews</i> 20, 52-55 (2023)	<a href="https://doi.org/10.1002/phvs.202300007">https://doi.org/10.1002/phvs.202300007</a>	10.1002/phvs.202300007