

Steven E Kooi

List of Publications by Year in descending order

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57

papers

3,058

citations

172457

29

h-index

155660

55

g-index

60

all docs

60

docs citations

60

times ranked

3840

citing authors

#	ARTICLE	IF	CITATIONS
1	A framework for scintillation in nanophotonics. <i>Science</i> , 2022, 375, eabm9293.	12.6	59
2	Bottom-up design toward dynamically robust polyurethane elastomers. <i>Polymer</i> , 2021, 218, 123518.	3.8	15
3	High-velocity micro-projectile impact testing. <i>Applied Physics Reviews</i> , 2021, 8, .	11.3	46
4	Modeling the Particle Capture Performance by Vertically Aligned Carbon Nanotubes for a Comet Rendezvous Sample Return. <i>Advances in Space Research</i> , 2021, , .	2.6	1
5	Laser-driven high-velocity microparticle launcher in atmosphere and under vacuum. <i>International Journal of Impact Engineering</i> , 2020, 137, 103465.	5.0	16
6	Interferometric and fluorescence analysis of shock wave effects on cell membrane. <i>Communications Physics</i> , 2020, 3, .	5.3	7
7	Impact-induced glass-to-rubber transition of polyurea under high-velocity temperature-controlled microparticle impact. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	18
8	Interface-by-design in zirconia-polyurea matrix hybrid composites. <i>Polymer</i> , 2020, 209, 122939.	3.8	6
9	Multi-frame interferometric imaging with a femtosecond stroboscopic pulse train for observing irreversible phenomena. <i>Review of Scientific Instruments</i> , 2020, 91, 033711.	1.3	5
10	Towards integrated tunable all-silicon free-electron light sources. <i>Nature Communications</i> , 2019, 10, 3176.	12.8	55
11	Molecular dependencies of dynamic stiffening and strengthening through high strain rate microparticle impact of polyurethane and polyurea elastomers. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	27
12	Dynamic Strengthening of Carbon Nanotube Fibers under Extreme Mechanical Impulses. <i>Nano Letters</i> , 2019, 19, 3519-3526.	9.1	30
13	Single-Shot Multi-Frame Imaging of Cylindrical Shock Waves in a Multi-Layered Assembly. <i>Scientific Reports</i> , 2019, 9, 3689.	3.3	7
14	Unraveling the high strain-rate dynamic stiffening in select model polyurethanes â” the role of intermolecular hydrogen bonding. <i>Polymer</i> , 2019, 168, 218-227.	3.8	24
15	Glass fracture by focusing of laser-generated nanosecond surface acoustic waves. <i>Scripta Materialia</i> , 2019, 158, 42-45.	5.2	10
16	Smithâ€“Purcell Radiation from Low-Energy Electrons. <i>ACS Photonics</i> , 2018, 5, 3513-3518.	6.6	46
17	Molecular influence in the glass/polymer interface design: The role of segmental dynamics. <i>Polymer</i> , 2018, 146, 222-229.	3.8	17
18	Maximal spontaneous photon emission and energy loss from free electrons. <i>Nature Physics</i> , 2018, 14, 894-899.	16.7	100

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19	Extreme Energy Absorption in Glassy Polymer Thin Films by Supersonic Micro-projectile Impact. <i>Materials Today</i> , 2018, 21, 817-824.	14.2	55
20	High-velocity micro-particle impact on gelatin and synthetic hydrogel. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 86, 71-76.	3.1	31
21	Acoustical breakdown of materials by focusing of laser-generated Rayleigh surface waves. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	12
22	Dynamics and extreme plasticity of metallic microparticles in supersonic collisions. <i>Scientific Reports</i> , 2017, 7, 5073.	3.3	44
23	Molecular influence in high-strain-rate microparticle impact response of poly(urethane urea) elastomers. <i>Polymer</i> , 2017, 123, 30-38.	3.8	37
24	High-order Smith-Purcell radiation in Silicon Nanowires. , 2017, , .		3
25	Smith-Purcell radiation from low-energy electrons. , 2017, , .		0
26	Focused laser-induced marangoni dewetting for patterning polymer thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 225-236.	2.1	28
27	Dynamics of supersonic microparticle impact on elastomers revealed by real-time multi-frame imaging. <i>Scientific Reports</i> , 2016, 6, 25577.	3.3	68
28	Interferometric analysis of laser-driven cylindrically focusing shock waves in a thin liquid layer. <i>Scientific Reports</i> , 2016, 6, 24.	3.3	30
29	Constructing Multifunctional Virus-Templated Nanoporous Composites for Thin Film Solar Cells: Contributions of Morphology and Optics to Photocurrent Generation. <i>Journal of Physical Chemistry C</i> , 2015, , 150610114441003.	3.1	14
30	Nanoporous Networks: Assembly of a Bacteriophage-Based Template for the Organization of Materials into Nanoporous Networks (Adv. Mater. 21/2014). <i>Advanced Materials</i> , 2014, 26, 3568-3568.	21.0	0
31	Assembly of a Bacteriophage-Based Template for the Organization of Materials into Nanoporous Networks. <i>Advanced Materials</i> , 2014, 26, 3398-3404.	21.0	63
32	Alignment and reordering of a block copolymer by solvent-enhanced thermal laser direct write. <i>Polymer</i> , 2014, 55, 1875-1882.	3.8	45
33	Direct-Write Thermocapillary Dewetting of Polymer Thin Films by a Laser-Induced Thermal Gradient. <i>Advanced Materials</i> , 2013, 25, 6100-6105.	21.0	46
34	Interferometric analysis of cylindrically focused laser-driven shock waves in a thin liquid layer. , 2012, , .		2
35	Rapid fabrication of 3D terahertz split ring resonator arrays by novel single-shot direct write focused proximity field nanopatterning. <i>Optics Express</i> , 2012, 20, 11097.	3.4	8
36	Focused laser spike (FLaSk) annealing of photoactivated chemically amplified resists for rapid hierarchical patterning. <i>Nanoscale</i> , 2011, 3, 2730.	5.6	20

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37	Reversible solid-state mechanochromic fluorescence from a boron lipid dye. <i>Journal of Materials Chemistry</i> , 2011, 21, 8295.	6.7	121
38	Photoluminescent energy transfer from poly(phenyleneethynylene)s to near-infrared emitting fluorophores. <i>Journal of Polymer Science Part A</i> , 2010, 48, 3382-3391.	2.3	21
39	Birefringence Control of Semicrystalline Block Copolymers by Crystallization under Confinement. <i>Langmuir</i> , 2010, 26, 17640-17648.	3.5	9
40	Synthesis of Stair-Stepped Polymers Containing Dibenz[<i>a</i> , <i>h</i>]anthracene Subunits. <i>Macromolecules</i> , 2010, 43, 2789-2793.	4.8	13
41	Enhanced Energy Dissipation in Periodic Epoxy Nanoframes. <i>Nano Letters</i> , 2010, 10, 2592-2597.	9.1	68
42	Anionic Oxidative Polymerization: The Synthesis of Poly(phenylenedicyanovinylene) (PPCN2V). <i>Journal of the American Chemical Society</i> , 2009, 131, 20-21.	13.7	20
43	The Role of the Interface in CO Oxidation on Au/CeO ₂ Multilayer Nanotowers. <i>Advanced Functional Materials</i> , 2008, 18, 2801-2807.	14.9	91
44	Emission Color Tuning with Polymer Molecular Weight for Difluoroboron Dibenzoylmethane-Polylactide. <i>Advanced Materials</i> , 2008, 20, 2099-2104.	21.0	111
45	Highly Emissive Iptycene-Fluorene Conjugated Copolymers: Synthesis and Photophysical Properties. <i>Macromolecules</i> , 2008, 41, 6672-6676.	4.8	46
46	Vapor Deposition of Hybrid Organic-Inorganic Dielectric Bragg Mirrors having Rapid and Reversibly Tunable Optical Reflectance. <i>Chemistry of Materials</i> , 2008, 20, 2262-2267.	6.7	85
47	Multi-Emissive Difluoroboron Dibenzoylmethane Polylactide Exhibiting Intense Fluorescence and Oxygen-Sensitive Room-Temperature Phosphorescence. <i>Journal of the American Chemical Society</i> , 2007, 129, 8942-8943.	13.7	527
48	Shape Control of Multivalent 3D Colloidal Particles via Interference Lithography. <i>Nano Letters</i> , 2007, 7, 647-651.	9.1	41
49	Enhanced Luminescence from Emissive Defects in Aggregated Conjugated Polymers. <i>Macromolecules</i> , 2007, 40, 8833-8841.	4.8	48
50	Defect-mode mirrorless lasing in dye-doped organic/inorganic hybrid one-dimensional photonic crystal. <i>Applied Physics Letters</i> , 2006, 88, 091102.	3.3	71
51	Highly Effective Water-Soluble Fluorescence Quenchers of Conjugated Polymer Thin Films in Aqueous Environments. <i>Macromolecules</i> , 2006, 39, 7175-7177.	4.8	31
52	Highly Emissive Conjugated Polymer Excimers. <i>Journal of the American Chemical Society</i> , 2005, 127, 13726-13731.	13.7	121
53	Solubilization of Single-Wall Carbon Nanotubes by Supramolecular Encapsulation of Helical Amylose. <i>Journal of the American Chemical Society</i> , 2003, 125, 4426-4427.	13.7	280
54	Thermal Fluorination and Annealing of Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5690-5695.	2.6	115

#	ARTICLE	IF	CITATIONS
55	Elektrochemische Modifizierung einzelner Kohlenstoff-Nanoröhren Diese Arbeit wurde von der Europäischen Union (Projektnummer HPRN-CT-1999-00011) unterstützt. Die Autoren danken B. Siegle, Max-Planck-Institut für Metallforschung, Stuttgart, für die Unterstützung bei der Aufnahme der Auger-Spektren.. Angewandte Chemie, 2002, 114, 1409.	2.0	22
56	Electrochemical Modification of Single Carbon Nanotubes. Angewandte Chemie - International Edition, 2002, 41, 1353-1355.	13.8	149
57	Energy Disposal in the Photodissociation of Co(CO) ₃ NO near 225 nm. Journal of Physical Chemistry A, 1998, 102, 10697-10702.	2.5	7