Paul Kinsler

List of Publications by Year in descending order

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104 papers 1,801 citations

279798 23 h-index 289244 40 g-index

106 all docs

 $\begin{array}{c} 106 \\ \\ \text{docs citations} \end{array}$

106 times ranked 1251 citing authors

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Motional Narrowing in Semiconductor Microcavities. Physical Review Letters, 1996, 77, 4792-4795. | 7.8 | 148 |
| 2 | A spacetime cloak, or a history editor. Journal of Optics (United Kingdom), 2011, 13, 024003. | 2.2 | 124 |
| 3 | Nonlinear envelope equation modeling of sub-cycle dynamics and harmonic generation in nonlinear waveguides. Optics Express, 2007, 15, 5382. | 3.4 | 119 |
| 4 | Quantum dynamics of the parametric oscillator. Physical Review A, 1991, 43, 6194-6208. | 2.5 | 106 |
| 5 | Optical pulse propagation with minimal approximations. Physical Review A, 2010, 81, . | 2.5 | 76 |
| 6 | Causality-Based Criteria for a Negative Refractive Index Must Be Used With Care. Physical Review Letters, 2008, 101, 167401. | 7.8 | 69 |
| 7 | Roadmap on transformation optics. Journal of Optics (United Kingdom), 2018, 20, 063001. | 2.2 | 64 |
| 8 | Few-cycle pulse propagation. Physical Review A, 2003, 67, . | 2.5 | 61 |
| 9 | Intersubband electron-electron scattering in asymmetric quantum wells designed for far-infrared emission. Physical Review B, 1998, 58, 4771-4778. | 3.2 | 57 |
| 10 | Quantum tunneling and thermal activation in the parametric oscillator. Physical Review A, 1989, 40, 4813-4816. | 2.5 | 50 |
| 11 | Limits to squeezing and phase information in the parametric amplifier. Physical Review A, 1993, 48, 3310-3320. | 2.5 | 48 |
| 12 | Pseudospectral spatial-domain: a new method for nonlinear pulse propagation in the few-cycle regime with arbitrary dispersion. Journal of Modern Optics, 2005, 52, 973-986. | 1,3 | 43 |
| 13 | Four Poynting theorems. European Journal of Physics, 2009, 30, 983-993. | 0.6 | 43 |
| 14 | Theory of directional pulse propagation. Physical Review A, 2005, 72, . | 2.5 | 40 |
| 15 | Unidirectional optical pulse propagation equation for materials with both electric and magnetic responses. Physical Review A, 2010, 81, . | 2.5 | 38 |
| 16 | Exciton polaritons in semiconductor quantum microcavities in a high magnetic field. Physical Review B, 1997, 55, 16395-16403. | 3.2 | 32 |
| 17 | Intersubband terahertz lasers using four-level asymmetric quantum wells. Journal of Applied Physics, 1999, 85, 23-28. | 2.5 | 31 |
| 18 | Limits of the unidirectional pulse propagation approximation. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2363. | 2.1 | 30 |

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| 19 | Behavior of high-order stimulated Raman scattering in a highly transient regime. Physical Review A, 2005, 72, . | 2.5 | 28 |
| 20 | Critical fluctuations in the quantum parametric oscillator. Physical Review A, 1995, 52, 783-790. | 2.5 | 27 |
| 21 | A spacetime cloak, or a history editor. Journal of Optics (United Kingdom), 2011, 13, 029501-029501. | 2.2 | 27 |
| 22 | Carrier-wave steepened pulses and gradient-gated high-order harmonic generation. Physical Review A, 2008, 77, . | 2.5 | 25 |
| 23 | Cloaks, editors, and bubbles: applications of spacetime transformation theory. Annalen Der Physik, 2014, 526, 51-62. | 2.4 | 25 |
| 24 | Comment on â€~Reply to comment on "Perfect imaging without negative refractionâ€â€™. New Journal of Physics, 2011, 13, 028001. | 2.9 | 22 |
| 25 | Comment on â€~â€~Langevin equation for the squeezing of light by means of a parametric oscillator''. Physical Review A, 1991, 44, 7848-7850. | 2.5 | 21 |
| 26 | The futures of transformations and metamaterials. Photonics and Nanostructures - Fundamentals and Applications, 2015, 15, 10-23. | 2.0 | 21 |
| 27 | Few-cycle soliton propagation. Physical Review A, 2004, 69, . | 2.5 | 20 |
| 28 | Criteria for negative refraction in active and passive media. Microwave and Optical Technology Letters, 2008, 50, 1804-1807. | 1.4 | 20 |
| 29 | Refractive index and wave vector in passive or active media. Physical Review A, 2009, 79, . | 2.5 | 19 |
| 30 | How to be causal: time, spacetime and spectra. European Journal of Physics, 2011, 32, 1687-1700. | 0.6 | 19 |
| 31 | Comment on   Quantum noise in the parametric oscillator: From squeezed states to coherent-state superpositions''. Physical Review Letters, 1990, 64, 236-236. | 7.8 | 17 |
| 32 | Triple correlations in non-degenerate parametric oscillators. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1995, 7, 727-741. | 0.9 | 16 |
| 33 | Active drains and causality. Physical Review A, 2010, 82, . | 2.5 | 16 |
| 34 | Transformation devices: Event carpets in space and space-time. Physical Review A, 2014, 89, . | 2.5 | 15 |
| 35 | Ultrashort-pulse modulation in adiabatically prepared Raman media. Optics Letters, 2005, 30, 180. | 3.3 | 14 |
| 36 | On spacetime transformation optics: temporal and spatial dispersion. New Journal of Physics, 2016, 18, 123010. | 2.9 | 14 |

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| 37 | Optical carrier wave shocking: Detection and dispersion. Physical Review E, 2007, 75, 066603. | 2.1 | 13 |
| 38 | Harmonic extended supercontinuum generation and carrier envelope phase dependent spectral broadening in silica nanowires. Optics Express, 2008, 16, 10886. | 3.4 | 13 |
| 39 | Testing quantum mechanics using third-order correlations. Physical Review A, 1996, 53, 2000-2008. | 2.5 | 12 |
| 40 | Linewidth narrowing of polaritons. Physical Review B, 1996, 54, 4988-4995. | 3.2 | 12 |
| 41 | Solid-state terahertz sources using quantum-well intersubband transitions. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 645-652. | 4.6 | 12 |
| 42 | Quadrature squeezing in the nondegenerate parametric amplifier. Physical Review A, 1995, 51, 864-867. | 2.5 | 11 |
| 43 | Faraday's Law and Magnetic Induction: Cause and Effect, Experiment and Theory. Physics, 2020, 2, 148-161. | 1.4 | 11 |
| 44 | Vacuum rabi splitting in semiconductor microcavities with applied electric and magnetic fields. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1995, 17, 1781-1786. | 0.4 | 10 |
| 45 | Interface and confined phonons in stepped quantum wells. Physica B: Condensed Matter, 1999, 263-264, 507-509. | 2.7 | 10 |
| 46 | Nonequilibrium electron heating in inter-subband terahertz lasers. Journal of Applied Physics, 2002, 91, 904-910. | 2.5 | 10 |
| 47 | Comment on "Correct definition of the Poynting vector in electrically and magnetically polarizable medium reveals that negative refraction is impossible― Optics Express, 2009, 17, 15167. | 3.4 | 10 |
| 48 | Interface phonons in asymmetric quantum well structures. Superlattices and Microstructures, 1999, 25, 163-166. | 3.1 | 9 |
| 49 | Maxwell's fishpond. European Journal of Physics, 2012, 33, 1737-1750. | 0.6 | 8 |
| 50 | Evaporating Black-Holes, Wormholes, and Vacuum Polarisation: Must they Always Conserve Charge?. Foundations of Physics, 2019, 49, 330-350. | 1.3 | 8 |
| 51 | Temporal boundaries in electromagnetic materials. New Journal of Physics, 2021, 23, 083032. | 2.9 | 8 |
| 52 | Wideband pulse propagation: Single-field and multifield approaches to Raman interactions. Physical Review A, 2005, 72, . | 2.5 | 7 |
| 53 | Maxwell's (<i>D, H</i>) excitation fields: lessons from permanent magnets. European Journal of Physics, 2019, 40, 025203. | 0.6 | 7 |
| 54 | Maximizing the population inversion by optimizing the depopulation rate in far-infrared quantum cascade lasers. Superlattices and Microstructures, 1999, 25, 373-376. | 3.1 | 6 |

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| 55 | The refractive index of reciprocal electromagnetic media. Journal of Optics (United Kingdom), 2016, 18, 044017. | 2.2 | 6 |
| 56 | Uni-directional optical pulses, temporal propagation, and spatial and temporal dispersion. Journal of Optics (United Kingdom), 2018, 20, 025502. | 2.2 | 6 |
| 57 | Customizing longitudinal electric field profiles using spatial dispersion in dielectric wire arrays. Optics Express, 2018, 26, 2478. | 3.4 | 6 |
| 58 | Electromagnetism, axions, and topology: A first-order operator approach to constitutive responses provides greater freedom. Physical Review A, 2020, 101, . | 2.5 | 6 |
| 59 | Hot-hole lasers in III–V semiconductors. Journal of Applied Physics, 2001, 90, 1692-1697. | 2.5 | 5 |
| 60 | Electromagnetic mode profile shaping in waveguides. Applied Physics A: Materials Science and Processing, 2017, 123, 1. | 2.3 | 5 |
| 61 | Generalized transformation design: Metrics, speeds, and diffusion. Wave Motion, 2018, 77, 91-106. | 2.0 | 5 |
| 62 | A new introduction to spatial dispersion: Reimagining the basic concepts. Photonics and Nanostructures - Fundamentals and Applications, 2021, 43, 100897. | 2.0 | 5 |
| 63 | Monte Carlo modelling of far-infrared intersubband lasers. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 48-51. | 2.7 | 4 |
| 64 | What is negative refraction?., 2009,,. | | 4 |
| 65 | An optimized algorithm for ionized impurity scattering in Monte Carlo simulations. Computer Physics Communications, 2002, 143, 136-141. | 7.5 | 3 |
| 66 | Modelling of angular effects in nonlinear optical processes. Optics Communications, 2006, 257, 164-175. | 2.1 | 3 |
| 67 | A comparison of the factorization approach to temporal and spatial propagation in the case of some acoustic waves. Journal of Physics Communications, 2018, 2, 025011. | 1.2 | 3 |
| 68 | Temporary Singularities and Axions: An Analytic Solution that Challenges Charge Conservation. Annalen Der Physik, 2021, 533, 2000565. | 2.4 | 3 |
| 69 | All kinds of cloaks, all kinds of transformations. Proceedings of SPIE, 2011, , . | 0.8 | 2 |
| 70 | Subwavelength mode profile customization using functional materials. Journal of Physics Communications, 2017, 1, 025003. | 1.2 | 2 |
| 71 | Mode Profile Shaping in Wire Media: Towards An Experimental Verification. Applied Sciences (Switzerland), 2018, 8, 1276. | 2.5 | 2 |
| 72 | Quantum well intersubband transitions as a source of terahertz radiation. , 0, , . | | 1 |

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| 73 | A theoretical study of quantum well terahertz lasers. , 0, , . | | 1 |
| 74 | Carrier dynamical issues for extending the operating wavelength of quantum cascade lasers. , 1999, 3828, 17. | | 1 |
| 75 | A coordinate-free criterion for negative phase velocity propagation. , 2009, , . | | 1 |
| 76 | Comment on †What is negative refraction?'. Journal of Modern Optics, 2010, 57, 2103-2108. | 1.3 | 1 |
| 77 | Comment on: On the inapplicability of a negativeâ€phaseâ€velocity condition as a negative refraction condition for active materials. Microwave and Optical Technology Letters, 2010, 52, 247-247. | 1.4 | 1 |
| 78 | Measure for carrier shocking. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 1889. | 2.1 | 1 |
| 79 | Electromagnetic mode profile shaping in waveguides. , 2016, , . | | 1 |
| 80 | Dispersion in space-time transformation optics. , 2016, , . | | 1 |
| 81 | <title>Tuning of the exciton-photon coupling in semiconductor quantum microcavities by external electric and magnetic fields</title> ., 1996, , . | | O |
| 82 | Theory of few-cycle pulses in an optical parametric oscillator. , 0, , . | | 0 |
| 83 | Hall effect and ionized impurity scattering in Si(1â°'x)Gex. Journal of Applied Physics, 2003, 94, 7159-7162. | 2.5 | O |
| 84 | True uni-directional pulse propagation using Fleck field variables. , 0, , . | | 0 |
| 85 | Optical carrier wave shocking: a parameter space analysis of the interplay between instantaneous and delayed material response. , 0, , . | | O |
| 86 | Optical Carrier Wave Shocking: A parameter space analysis of the interplay between instantaneous and delayed material response., 0,,. | | 0 |
| 87 | Transverse spatial structures and OPCPA. , 2006, , . | | O |
| 88 | Phase retention in SPM super-broadened pulses. , 2006, , . | | 0 |
| 89 | Proposal for absolute CEP measurement using 0-to-f self-referencing. , 2007, , . | | 0 |
| 90 | From Supercontinuum Generation to Carrier Shocks: Extreme Nonlinear Propagation in Photonic Crystal Fiber., 2007,,. | | 0 |

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| 91 | Thinking outside the envelope: New perspectives for nonlinear fiber optics. , 2008, , . | | 0 |
| 92 | Pulse propagation in materials with both electric and magnetic responses: Unlimited bandwidth and only one approximation. , $2009, , .$ | | 0 |
| 93 | Dressed for success: A Poynting vector for each season. , 2009, , . | | 0 |
| 94 | Negative refractive index in natural, non-magnetic media. , 2009, , . | | 0 |
| 95 | Spacetime Cloaking. Optics and Photonics News, 2011, 22, 43. | 0.5 | 0 |
| 96 | Cloaking space–time. Physics World, 2011, 24, 35-38. | 0.0 | 0 |
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| 98 | Space-time Cloaking. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 173-203. | 0.1 | 0 |
| 99 | Impedance rescaling and scattering from transformation optics devices. Journal of Physics Communications, 2018, 2, 045011. | 1.2 | 0 |
| 100 | Towards quantum well hot hole lasers. Springer Proceedings in Physics, 2001, , 711-712. | 0.2 | 0 |
| 101 | Synchronously Pumped Optical Parametric Oscillators with Anomalous Wavelength Tuning Behaviour. Springer Series in Chemical Physics, 2003, , 140-142. | 0.2 | 0 |
| 102 | Phase and few-cycle pulses in nonlinear optics. , 2004, , . | | 0 |
| 103 | Pseudospectral and FDTD methods applied to nonlinear pulse propagation in the few-cycle regime. , 2004, , . | | 0 |
| 104 | A spacetime cloak, or a history editor. Journal of Optics (United Kingdom), 2011, 13, 029501-029501. | 2.2 | 0 |