

Erhard W Rothe

List of Publications by Year in descending order

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87
papers

2,870
citations

147566

31
h-index

174990

52
g-index

88
all docs

88
docs citations

88
times ranked

874
citing authors

#	ARTICLE	IF	CITATIONS
1	Comments on "Size dependence of the lattice parameters of carbon supported platinum nanoparticles: X-ray diffraction analysis and theoretical considerations," RSC Adv., 2014, 4, 35959-35965. RSC Advances, 2022, 12, 7584-7586.	1.7	4
2	Ultra-rapid cooling of aluminum: Homogeneous solidification to anisotropic nanocrystals. AIP Advances, 2020, 10, 045319.	0.6	3
3	Organic nanostructures on silicon, created with semitransparent polystyrene spheres and 248 nm laser pulses. Nanotechnology, 2008, 19, 165301.	1.3	4
4	Nanobumps on silicon created with polystyrene spheres and 248 or 308nm laser pulses. Applied Physics Letters, 2006, 89, 223113.	1.5	18
5	Superior mirage effect in supercritical CO ₂ : Experiment and model. Journal of Supercritical Fluids, 2005, 35, 260-264.	1.6	5
6	Determination of Concentrations of Solutes in Gaseous, Liquid, and Supercritical CO ₂ by Means of UV Raman Spectroscopy. Chemical Engineering Communications, 2005, 192, 581-596.	1.5	1
7	Large mirage effect in supercritical CO ₂ . Journal of Supercritical Fluids, 2000, 18, 193-200.	1.6	9
8	Laser-Induced Fluorescence of CF ₂ from a CH ₄ Flame and an H ₂ Flame with Addition of HCFC-22 and HFC-134a. Combustion and Flame, 1998, 113, 236-241.	2.8	6
9	Rayleigh Scattering of Excimer Laser Light from Some Simple Molecules at 193 nm and 248 nm: The Effect of Polarization upon Imaging Diagnostics. Applied Spectroscopy, 1997, 51, 1012-1016.	1.2	5
10	One-dimensional imaging of H ₂ densities and of temperatures via rotational Raman scattering of narrow-band, 248 nm, laser light. Journal of Raman Spectroscopy, 1997, 28, 605-612.	1.2	6
11	One-dimensional imaging of H ₂ densities and of temperatures via rotational Raman scattering of narrow-band, 248 nm, laser light. Journal of Raman Spectroscopy, 1997, 28, 605-612.	1.2	1
12	Internal state populations and the time-of-flight of ground-state species ejected after the 193 nm excimer laser ablation of CuO, BaO ₂ , and Y ₂ O ₃ . Journal of Applied Physics, 1994, 75, 522-528.	1.1	12
13	YO ₂ Vibrational State Distributions Measured after the Excimer Laser Ablation of Y ₂ O ₃ Using a Laser-Initiated Pulsed Discharge as a Probe. Applied Spectroscopy, 1994, 48, 248-251.	1.2	4
14	Graphitization of synthetic diamond by 193 nm laser light: Comparison of ¹² C-enriched diamonds with those of natural isotopic composition. Diamond and Related Materials, 1994, 3, 195-197.	1.8	4
15	Imaging of the Fluorescence Created by Ablation of Y ₂ O ₃ , BaO ₂ , CuO, and YBa ₂ Cu ₃ O _{7-x} by 308-nm Laser Light. Applied Spectroscopy, 1993, 47, 1046-1057.	1.2	7
16	The yttrium oxide chemiluminescence from the 308 nm excimer laser ablation of YBa ₂ Cu ₃ O _{7-x} , Y ₂ O ₃ , and YCl ₃ . Journal of Applied Physics, 1993, 73, 7810-7817.	1.1	27
17	The effects of the electric field associated with a laser-induced pulsed discharge on the ablation-generated plumes of YBa ₂ Cu ₃ O _{7-x} . Journal of Applied Physics, 1992, 72, 1113-1125.	1.1	11
18	Time-resolved emission spectra following the 193-nm photoablation of CuO, BaO ₂ , Y ₂ O ₃ , and YBa ₂ Cu ₃ O _{7-x} in vacuum and oxygen. Journal of Applied Physics, 1991, 70, 2337-2342.	1.1	41

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19	Absorption of laser light in air in the 193 nm range: Analysis of laser locking. Journal of Quantitative Spectroscopy and Radiative Transfer, 1990, 44, 373-378.	1.1	7
20	Photoablation of polymers at 193 nm: Shot-to-shot study of emission spectra, etch depths, and transmission. Journal of Applied Physics, 1989, 66, 1370-1374.	1.1	17
21	Resonance-enhanced multiphoton ionization of vibrationally excited state-selected NH ₃ . Spectroscopy and collisional state transfer. Chemical Physics Letters, 1988, 146, 89-95.	1.2	20
22	Resonance enhanced multiphoton ionization (2+1) in NH ₃ using linearly and circularly polarized light. Chemical Physics, 1988, 126, 145-150.	0.9	0
23	Optogalvanic OH (A $\hat{\nu}$ -X) spectrum. Journal of Quantitative Spectroscopy and Radiative Transfer, 1988, 39, 339-340.	1.1	0
24	Crossed beam study of Na*(2P _{3/2})+O ₂ $\hat{\nu}$ Na++O ₂ $\hat{\nu}$. The dependence of the total cross section upon Na* alignment. Journal of Chemical Physics, 1988, 88, 5981-5982.	1.2	2
25	Emission spectra from ArF laser ablation of high T _c superconductor Bi ₂ CaSr ₂ Cu ₂ O ₉ . Applied Physics Letters, 1988, 53, 2698-2700.	1.5	41
26	Comment on: Polarized absorption spectroscopy of lambda doublet molecules: Transition moment vs electron density distribution. Journal of Chemical Physics, 1988, 89, 5965-5966.	1.2	0
27	Influence of electrical resonance on the interpretation of optogalvanic data. Journal of Applied Physics, 1987, 61, 109-112.	1.1	9
28	High-sensitivity, state-specific detection of H ₂ by three-photon direct ionization in gases and discharges. Optics Communications, 1986, 58, 113-117.	1.0	11
29	Effect of electronic alignment upon the reaction 2Na(2P _{3/2}) $\hat{\nu}$ Na ₂ ++ $\hat{\nu}$. Physical Review A, 1985, 31, 1362-1365.	1.0	14
30	Strong propensity rules in the photodissociation of a single rotational quantum state of vibrationally excited H ₂ O. Journal of Chemical Physics, 1985, 83, 1429-1430.	1.2	78
31	Analysis of chemical dynamics via $\hat{\nu}$ doubling: Directed lobes in product molecules and transition states. Journal of Chemical Physics, 1985, 82, 3634-3640.	1.2	107
32	Nuclear and electron dynamics in the photodissociation of water. Journal of Chemical Physics, 1984, 80, 2548-2569.	1.2	263
33	Polarized LIF spectroscopy of OH formed by the photodissociation of H ₂ O by polarized 157 nm light. Journal of Chemical Physics, 1983, 78, 989-990.	1.2	40
34	Molecular beam reaction Na ₃ +SF ₆ . A triple electron $\hat{\nu}$ ump mechanism. Journal of Chemical Physics, 1982, 76, 5650-5651.	1.2	4
35	Laser photodissociation of H ₂ O at 157 nm: rotational energy distribution in product OH(X ₂ I). Chemical Physics Letters, 1982, 86, 270-274.	1.2	16
36	Collision-induced dissociation of aligned ions. Chemical Physics Letters, 1981, 81, 175-178.	1.2	6

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37	Two-step photoionization of Na ₂ : dependence on alignment. <i>Chemical Physics Letters</i> , 1981, 78, 16-20.	1.2	20
38	Observation of polarization of atomic fluorescence excited by laser-induced dissociation of Na ₂ . <i>Chemical Physics Letters</i> , 1980, 72, 100-103.	1.2	52
39	Ionization reactions of halogens and metal polyhalides with alkali atoms and dimers: Absolute cross sections. <i>Journal of Chemical Physics</i> , 1980, 73, 1280-1285.	1.2	5
40	Photodissociation of Na ₂ and Rb ₂ : Analysis of atomic fine structure of 2P products. <i>Journal of Chemical Physics</i> , 1980, 72, 5145-5150.	1.2	28
41	Measurement of boron trihalide electron affinities: correlation with boron-nitrogen adduct strengths. <i>Inorganic Chemistry</i> , 1980, 19, 829-831.	1.9	34
42	Negative ions from reactions of alkalis with SnCl ₄ , GeCl ₄ and TiCl ₄ . <i>International Journal of Mass Spectrometry and Ion Physics</i> , 1979, 31, 77-84.	1.3	10
43	Two-photon ionization of Li ₂ : isotopic separation and determination of IP(Li ₂) and De(Li ₂ ⁺). <i>Chemical Physics Letters</i> , 1978, 56, 336-338.	1.2	43
44	Isotope fractionation in two-step photoionization of Li ₂ . <i>Chemical Physics Letters</i> , 1978, 53, 74-78.	1.2	44
45	Two-photon ionization of Na ₂ by an Ar ⁺ laser. <i>Journal of Chemical Physics</i> , 1978, 68, 2518-2519.	1.2	16
46	Ionization reactions of metal hexafluorides with alkali atoms and dimers. <i>Journal of Chemical Physics</i> , 1977, 67, 377-381.	1.2	42
47	Chemical ionization reactions of alkali dimers with halogen molecules. <i>Journal of Chemical Physics</i> , 1977, 66, 3847-3853.	1.2	28
48	Near-threshold ionization of excited Na(3 ² P) by collisions with O ₂ and SO ₂ . <i>Chemical Physics Letters</i> , 1977, 51, 71-74.	1.2	8
49	Negative gaseous ions from nitric acid. <i>Journal of Chemical Physics</i> , 1976, 64, 1247-1248.	1.2	21
50	Negative ion formation in halocarbons by charge exchange with cesium. <i>Journal of Chemical Physics</i> , 1976, 64, 1270-1275.	1.2	31
51	Negative ions from phosphorus halides due to cesium charge exchange. <i>Journal of Chemical Physics</i> , 1976, 65, 565-569.	1.2	32
52	Chemical ionization in thermal energy collisions of K ₂ and Cs ₂ with halogen molecules. <i>Journal of Chemical Physics</i> , 1976, 65, 2912-2913.	1.2	9
53	Ionizing collisions of cesium with Cl ₂ , Br ₂ , and I ₂ . <i>Journal of Chemical Physics</i> , 1975, 62, 132.	1.2	27
54	Measurement of electron affinities of O ₃ , SO ₂ , and SO ₃ by collisional ionization. <i>Journal of Chemical Physics</i> , 1975, 62, 3829.	1.2	60

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55	Collisional ionization of cesium: Relaxation of product fragments. Journal of Chemical Physics, 1974, 60, 4096-4097.	1.2	10
56	Collisional ionization of Cs with SF6. Journal of Chemical Physics, 1974, 61, 4929-4930.	1.2	40
57	Anion production from Cs + CF3X: evidence for stripping. Chemical Physics Letters, 1974, 26, 434-436.	1.2	16
58	A cesium impact source for negative-ion mass spectra. International Journal of Mass Spectrometry and Ion Physics, 1974, 14, 79-88.	1.3	29
59	Negative ion formation from energetic collisions of cesium with CO2, CS2, and COS. Journal of Chemical Physics, 1974, 61, 2592-2595.	1.2	32
60	Measurement of the electron affinity of NO2. Journal of Chemical Physics, 1973, 58, 5801-5806.	1.2	35
61	A Time-of-Flight Chemical Accelerator for Low Center-of-Mass Energy Spreads. Review of Scientific Instruments, 1972, 43, 917-925.	0.6	15
62	Systematic Error in Beam-Gas Experiments: The Electron Affinity of Br2. Journal of Chemical Physics, 1971, 54, 4520-4522.	1.2	14
63	Scattering of Lithium by a Series of Molecules. IV. Miscellaneous Molecules. Journal of Chemical Physics, 1970, 53, 2501-2505.	1.2	12
64	Glory Scattering of Lithium by a Series of Molecules. II. Fluorocarbons and Hydrocarbons. Journal of Chemical Physics, 1969, 50, 3531-3538.	1.2	20
65	Alkali-Alkali Glory Scattering in the $3^1\Sigma$ State. Journal of Chemical Physics, 1968, 49, 4750-4755.	1.2	16
66	Glory Scattering of Lithium by a Series of Molecules. I. Diatomics. Journal of Chemical Physics, 1968, 48, 3945-3955.	1.2	54
67	Trujillo and confluent beams. Physics Today, 1968, 21, 18-18.	0.3	0
68	Symmetric-Resonance Charge Transfer in Ar from 0.1-20 eV Using Merging Beams. Physical Review, 1967, 157, 101-102.	2.7	35
69	Glory Extrema in Total Cross Sections: Li-Hg. Journal of Chemical Physics, 1967, 46, 1209-1210.	1.2	19
70	Measurement of the Li-Hg Total Cross Section at Very Low Energies. Journal of Chemical Physics, 1967, 46, 4549-4550.	1.2	2
71	Merging Beams, A Different Approach to Collision Cross Section Measurements. Review of Scientific Instruments, 1966, 37, 1655-1661.	0.6	105
72	Velocity Dependence of the Total Cross Section for the Scattering of Metastable He(3S1) by Helium, Argon, and Krypton. Journal of Chemical Physics, 1965, 42, 3310-3314.	1.2	132

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73	Measurements of Absolute Total Cross Sections for Rare Gas Scattering. Journal of Chemical Physics, 1965, 43, 4177-4179.	1.2	50
74	Atomic Beam Measurements of van der Waals Forces. Journal of Chemical Physics, 1965, 42, 3306-3309.	1.2	42
75	Avoiding Erroneous Submicron Pressure Readings: A Refrigerated McLeod. Journal of Vacuum Science and Technology, 1964, 1, 66-68.	1.9	47
76	Low-Energy Electron Scattering from Atomic Nitrogen. Physical Review, 1963, 129, 2069-2071.	2.7	74
77	Substantiation of a Method for Obtaining Interatomic Potential Energy Parameters. Journal of Chemical Physics, 1963, 39, 493-494.	1.2	15
78	Interaction Potentials from the Velocity Dependence of Total Atom-Atom Scattering Cross Sections. Physical Review, 1963, 130, 2333-2338.	2.7	41
79	Velocity Dependence of the Total Cross Section for Atom-Atom Scattering at Thermal Energies. Physical Review Letters, 1962, 9, 494-495.	2.9	22
80	Velocity Dependence of the Total Cross Section for the Scattering of Li and K by Xe. Physical Review, 1962, 128, 659-662.	2.7	39
81	Scattering of Thermal Rare Gas Beams by Argon. Influence of the Long-Range Dispersion Forces. Physical Review, 1962, 126, 598-602.	2.7	37
82	Slotted Disk Velocity Selector of Extended Range. Review of Scientific Instruments, 1962, 33, 841-843.	0.6	59
83	Electron Impact Ionization of Atomic Hydrogen and Atomic Oxygen. Physical Review, 1962, 125, 582-583.	2.7	110
84	Electron Impact Ionization of Atomic Nitrogen. Physical Review, 1962, 127, 1647-1649.	2.7	70
85	Scattering of Low-Energy Electrons by Atomic Hydrogen. Physical Review, 1961, 124, 135-136.	2.7	60
86	Total Collision Cross Sections for the Interaction of Molecular Beams of Cesium Chloride with Gases. Influence of the Dipole-Dipole Force upon the Scattering. Journal of Chemical Physics, 1960, 33, 584-590.	1.2	54
87	Total Collision Cross Sections for the Interaction of Atomic Beams of Alkali Metals with Gases. Journal of Chemical Physics, 1959, 31, 1619-1627.	1.2	239