

David Citrin

List of Publications by Year in descending order

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153
papers

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153
all docs

153
docs citations

153
times ranked

2671
citing authors

#	ARTICLE	IF	CITATIONS
1	Photonic Sampling Analog-to-Digital Conversion With Read-In Timing Jitter. IEEE Transactions on Communications, 2022, 70, 445-454.	4.9	6
2	Revealing inscriptions obscured by time on an early-modern lead funerary cross using terahertz multispectral imaging. Scientific Reports, 2022, 12, 3429.	1.6	3
3	Terahertz Dielectric Characterization of Low-Loss Thermoplastics for 6G Applications. International Journal of Wireless Information Networks, 2022, 29, 269-274.	1.8	6
4	Full scale promoted convolution neural network for intelligent terahertz 3D characterization of GFRP delamination. Composites Part B: Engineering, 2022, 242, 110022.	5.9	9
5	Carrier-envelope-stabilized optical frequency combs: effect of fluctuations on the comb line shape. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 719.	0.9	3
6	Nondestructive characterization of nanoporous alumina films using terahertz scattering imaging. Surface and Coatings Technology, 2021, 408, 126792.	2.2	4
7	Microwave Frequency Comb Generation by Gain-Switching Versus Relaxation Oscillations. IEEE Photonics Technology Letters, 2021, 33, 491-494.	1.3	9
8	Terahertz Permittivity of Pressed ZnO and CuO Powder in Polyethylene Pellets: Effect of Porosity. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 402-407.	2.0	3
9	Connection between Optical Frequency Combs and Microwave Frequency Combs Produced by Active-Mode-Locked Lasers Subject to Timing Jitter. Physical Review Applied, 2021, 16, .	1.5	2
10	Flexibly designed polarization-independent electromagnetically induced transparency-like effect via hybrid metalâ€“dielectric terahertz metamaterial. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C136.	0.9	2
11	Diagnosis of injection-molded weld lines in ABS thermoplastic by polarized terahertz reflective imaging. NDT and E International, 2021, 122, 102497.	1.7	3
12	Three-dimensional nondestructive characterization of delamination in GFRP by terahertz time-of-flight tomography with sparse Bayesian learning-based spectrum-graph integration strategy. Composites Part B: Engineering, 2021, 225, 109285.	5.9	16
13	Characterization of nanoporous alumina using terahertz reflectometry and scattering imaging. , 2021, , .		0
14	Terahertz Imaging for Paper Handling of Legacy Documents. Sensors, 2021, 21, 6756.	2.1	3
15	Complete two-dimensional photonic bandgap in refractive-index ratio 21 photonic crystals due to high-order bands. Optics Letters, 2021, 46, 5558-5561.	1.7	1
16	Terahertz Nondestructive Stratigraphic Analysis of Complex Layered Structures: Reconstruction Techniques. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 929-946.	1.2	4
17	Optical square-wave generation in a semiconductor laser with optoelectronic feedback. Optics Letters, 2021, 46, 6031.	1.7	4
18	Effects of Timing Noise on Square-Wave Optoelectronic Oscillators. Applied Sciences (Switzerland), 2021, 11, 12038.	1.3	1

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19	Power Spectral Density of Injection-Locked Optoelectronic Oscillators: Effects of Phase Noise. <i>Journal of Lightwave Technology</i> , 2021, 39, 7734-7739.	2.7	4
20	Scanning acoustic microscopy investigation of weld lines in injection-molded parts manufactured from industrial thermoplastic polymer. <i>Micron</i> , 2020, 138, 102925.	1.1	7
21	Thickness characterization of multi-layer coated steel by terahertz time-of-flight tomography. <i>NDT and E International</i> , 2020, 116, 102358.	1.7	19
22	Compact high-performance polarization beam splitter based on a silicon photonic crystal heterojunction. <i>Optical Materials</i> , 2020, 109, 110256.	1.7	11
23	Pulsed THz imaging for thickness characterization of plastic sheets. <i>NDT and E International</i> , 2020, 116, 102338.	1.7	20
24	Terahertz Time-of-Flight Tomography Beyond the Axial Resolution Limit: Autoregressive Spectral Estimation Based on the Modified Covariance Method. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2020, 41, 926-939.	1.2	19
25	Staircase Dynamics of a Photonic Microwave Oscillator Based on a Laser Diode with Delayed Optoelectronic Feedback. <i>Physical Review Applied</i> , 2020, 13, .	1.5	11
26	Optical constants of CuO and ZnO particles in the terahertz frequency range. <i>Ceramics International</i> , 2020, 46, 24110-24119.	2.3	9
27	Quantum stabilization of microcavity excitation in a coupled microcavityâ€‘half-cavity system. <i>Physical Review B</i> , 2020, 101, .	1.1	3
28	Nondestructive measurement of mill-scale thickness on steel by terahertz time-of-flight tomography. <i>Surface and Coatings Technology</i> , 2020, 393, 125765.	2.2	19
29	Characterization of nanoporous Al ₂ O ₃ films at terahertz frequencies. <i>Optics Letters</i> , 2020, 45, 4092.	1.7	8
30	Terahertz Characterization of Roman Amphora Sherds. , 2020, , .		0
31	Resonances between fundamental frequencies for lasers with large delayed feedbacks. <i>Physical Review E</i> , 2019, 99, 062219.	0.8	9
32	Multistate intermittency on the route to chaos of a semiconductor laser subjected to optical feedback from a long external cavity. <i>Chaos</i> , 2018, 28, 011102.	1.0	9
33	Enhancing optical-feedback-induced chaotic dynamics in semiconductor ring lasers via optical injection. <i>Nonlinear Dynamics</i> , 2018, 92, 315-324.	2.7	28
34	Chaotic laser voltage: An electronic entropy source. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	6
35	Visualization of subsurface damage in woven carbon fiber-reinforced composites using polarization-sensitive terahertz imaging. <i>NDT and E International</i> , 2018, 99, 72-79.	1.7	37
36	Low-Noise X-Band Tunable Microwave Generator Based on a Semiconductor Laser With Feedback. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 1597-1600.	1.3	18

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37	Terahertz Superresolution Stratigraphic Characterization of Multilayered Structures Using Sparse Deconvolution. IEEE Transactions on Terahertz Science and Technology, 2017, 7, 260-267.	2.0	67
38	Tunable X-Band Optoelectronic Oscillators Based on External-Cavity Semiconductor Lasers. IEEE Journal of Quantum Electronics, 2017, 53, 1-6.	1.0	13
39	Terahertz Quantitative Nondestructive Evaluation of Failure Modes in Polymer-Coated Steel. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-7.	1.9	37
40	Global mapping of stratigraphy of an old-master painting using sparsity-based terahertz reflectometry. Scientific Reports, 2017, 7, 15098.	1.6	51
41	Stratigraphic details of a 17th century oil painting on canvas revealed by terahertz imaging. , 2017, , .		0
42	Terahertz deconvolution based on autoregressive spectral extrapolation. , 2017, , .		0
43	Depth resolution enhancement of terahertz deconvolution by autoregressive spectral extrapolation. Optics Letters, 2017, 42, 1828.	1.7	33
44	Terahertz frequency-wavelet domain deconvolution for stratigraphic and subsurface investigation of art painting. Optics Express, 2016, 24, 26972.	1.7	62
45	A multi-GHz chaotic optoelectronic oscillator based on laser terminal voltage. Applied Physics Letters, 2016, 108, 191109.	1.5	21
46	Compressive Sensing with Optical Chaos. Scientific Reports, 2016, 6, 35206.	1.6	45
47	Terahertz reflective imaging of damage mechanisms in the coating on metal substrate. , 2016, , .		0
48	Comparative study of mid-20thC. Art using THz and X-ray imaging. , 2016, , .		0
49	Polarization-resolved terahertz imaging of intra- and inter-laminar damages in hybrid fiber-reinforced composite laminate subject to low-velocity impact. Composites Part B: Engineering, 2016, 92, 167-174.	5.9	53
50	Low-frequency fluctuations in an external-cavity laser leading to extreme events. Physical Review E, 2016, 93, 042216.	0.8	15
51	Enhanced Terahertz Imaging of Small Forced Delamination in Woven Glass Fibre-reinforced Composites with Wavelet De-noising. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 289-301.	1.2	50
52	An analogy between various machine-learning techniques for detecting construction materials in digital images. KSCE Journal of Civil Engineering, 2016, 20, 1178-1188.	0.9	70
53	Slow Light in Square-Lattice Chalcogenide Photonic Crystal Holey Fibers. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 271-278.	1.9	17
54	Impact damage characterization in hybrid fiber-reinforced composites using terahertz imaging in time and frequency domain. , 2015, , .		0

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55	Multiscale Ordinal Symbolic Analysis of the Lang-Kobayashi Model for External-Cavity Semiconductor Lasers: A Test of Theory. IEEE Journal of Quantum Electronics, 2015, 51, 1-6.	1.0	11
56	Nondestructive evaluation of forced delamination in glass fiber-reinforced composites by terahertz and ultrasonic waves. Composites Part B: Engineering, 2015, 79, 667-675.	5.9	129
57	Polarization-Independent Single-Mode Waveguiding With Honeycomb Photonic Crystals. IEEE Photonics Technology Letters, 2015, 27, 840-843.	1.3	13
58	Experimental bifurcation-cascade diagram of an external-cavity semiconductor laser. Optics Express, 2014, 22, 2348.	1.7	24
59	Statistics of the optical intensity of a chaotic external-cavity DFB laser. Optics Letters, 2014, 39, 5949.	1.7	18
60	Bifurcation-Cascade Diagrams of an External-Cavity Semiconductor Laser: Experiment and Theory. IEEE Journal of Quantum Electronics, 2014, 50, 965-972.	1.0	10
61	Mapping the nonlinear dynamics of a laser diode via its terminal voltage. Optics Letters, 2014, 39, 5630.	1.7	11
62	Two approaches for ultrafast random bit generation based on the chaotic dynamics of a semiconductor laser. Optics Express, 2014, 22, 6634.	1.7	115
63	Polarization-independent slow light in annular photonic crystals. Applied Physics Letters, 2013, 102, .	1.5	28
64	Slab-Thickness Dependence of Photonic Bandgap in Photonic-Crystal Slabs. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1636-1642.	1.9	11
65	The vector reflector. Optics Letters, 2012, 37, 2376.	1.7	4
66	Plasmonic structures of metal nanoparticles: Chains and arrays. , 2012, , .		0
67	Highly Sensitive Athermal Optical Microring Sensor Based on Intensity Detection. IEEE Journal of Quantum Electronics, 2011, 47, 354-358.	1.0	24
68	Vector lensing with a single chain of metal nanoparticles. Physical Review B, 2010, 81, .	1.1	2
69	High sensitivity dual microring sensor based on intensity detection. , 2010, , .		0
70	Dual-microring-resonator interference sensor. Applied Physics Letters, 2009, 95, .	1.5	31
71	Multiplexing digital information using hyperchaotic optoelectronic oscillators with nonlinear time-delayed feedback loops. , 2009, , .		0
72	Simple technique to fabricate microscale and nanoscale silicon waveguide devices. Frontiers of Optoelectronics in China, 2009, 2, 308-311.	0.2	6

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73	Intracavity nonlinearities in quantum-cascade lasers. <i>Journal of Applied Physics</i> , 2009, 106, 031101.	1.1	21
74	Time-Delay Identification in a Chaotic Semiconductor Laser With Optical Feedback: A Dynamical Point of View. <i>IEEE Journal of Quantum Electronics</i> , 2009, 45, 879-1891.	1.0	191
75	Design of nonlinearity-enhanced quantum-cascade lasers. <i>Optical and Quantum Electronics</i> , 2008, 40, 191-195.	1.5	1
76	Strong excitonic mixing effect in asymmetric double quantum wells: On the optimization of electroabsorption modulators. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 2400-2403.	0.8	0
77	All-Optical clock enhancement for transmitted NRZ data streams based on CFBG. <i>Microwave and Optical Technology Letters</i> , 2008, 50, 2764-2768.	0.9	1
78	Plasmon Polaritons in 2-D Nanoparticle Arrays. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2008, 14, 1530-1535.	1.9	5
79	Far-field optical coupling to semi-infinite metal-nanoparticle chains. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008, 25, 937.	0.9	7
80	The complete bandgap in ring-shaped photonic crystal SOI slab. , 2008, , .		1
81	Excitation of nonradiative surface-plasmon-polariton beams in nanoparticle arrays. <i>Physical Review B</i> , 2008, 78, .	1.1	5
82	Optical-layer multicast in wavelength-routing network. , 2008, , .		0
83	Efficient terahertz generation using trap-enhanced fields in semi-insulating photoconductors by spatially broadened excitation. <i>Journal of Applied Physics</i> , 2007, 101, 053105.	1.1	14
84	Loss of time-delay signature in the chaotic output of a semiconductor laser with optical feedback. <i>Optics Letters</i> , 2007, 32, 2960.	1.7	190
85	Graded index photonic crystals. <i>Optics Express</i> , 2007, 15, 1240.	1.7	129
86	Photonic-Crystal Heterostructure Waveguides. <i>IEEE Journal of Quantum Electronics</i> , 2007, 43, 78-84.	1.0	22
87	Optical and Transport Characteristics of Quantum-Cascade Lasers With Optimized Second-Harmonic Generation. <i>IEEE Journal of Quantum Electronics</i> , 2007, 43, 391-398.	1.0	12
88	Optimized Asymmetric Double Quantum Well for High Electric-Field-Sensitivity Electroabsorption: Excitonic Mixing Effects. <i>IEEE Journal of Quantum Electronics</i> , 2007, 43, 651-654.	1.0	9
89	A Novel Optical Coupler Design With Graded-Index Photonic Crystals. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 1532-1534.	1.3	26
90	A phase it's going through. <i>Nature</i> , 2007, 449, 669-670.	13.7	3

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91	Coulomb and radiation screening in photoconductive terahertz sources. Applied Physics Letters, 2006, 88, 161117.	1.5	67
92	Quantum control with linear chirp in two-subbandn-type doped quantum wells. Physical Review B, 2006, 74, .	1.1	30
93	Plasmon-polariton transport in metal-nanoparticle chains embedded in a gain medium. Optics Letters, 2006, 31, 98.	1.7	105
94	Supersymmetric optimization of second-harmonic generation in mid-infrared quantum cascade lasers. Optics Express, 2006, 14, 4043.	1.7	39
95	Plasmon-polariton transport in hybrid semiconductorâ€metalâ€nanoparticle structures with gain. Physica Status Solidi (B): Basic Research, 2006, 243, 2349-2353.	0.7	2
96	Enhancement of second-harmonic generation in mid-infrared quantum cascade lasers. , 2006, , .		0
97	Photonic crystals for biochemical sensing in the terahertz region. Applied Physics Letters, 2005, 87, 041108.	1.5	91
98	Quantum Coherence in an Optical Modulator. Science, 2005, 310, 651-653.	6.0	118
99	Enhancement of terahertz radiation from photoconductors by elliptically focused excitation. Applied Physics Letters, 2005, 87, 061108.	1.5	5
100	Interband optical spectra of magnetoexcitons in semiconductor nanorings: Electron-hole spatial correlation. Physical Review B, 2005, 72, .	1.1	6
101	Biochemical sensors with photonic crystals in the terahertz region. , 2005, , .		2
102	The transport of photoexcited electrons in photoconductive THz sources with spatially patterned excitation. , 2005, , .		0
103	Coupled-resonator optical waveguides for biochemical sensing of nanoliter volumes of analyte in the terahertz region. Applied Physics Letters, 2005, 87, 241119.	1.5	52
104	Annular photonic crystals. Optics Express, 2005, 13, 10316.	1.7	109
105	Plasmon Polaritons in Finite-Length Metalâ~Nanoparticle Chains:â The Role of Chain Length Unravalled. Nano Letters, 2005, 5, 985-989.	4.5	107
106	Magnetic Bloch Oscillations in Nanowire Superlattice Rings. Physical Review Letters, 2004, 92, 196803.	2.9	11
107	Coherent Excitation Transport in Metalâ~Nanoparticle Chains. Nano Letters, 2004, 4, 1561-1565.	4.5	139
108	Electrodynamical treatment of the electron-hole long-range exchange interaction in semiconductor nanocrystals. Physics of the Solid State, 2003, 45, 768-781.	0.2	15

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109	Quantum-well optical modulator at terahertz frequencies. Journal of Applied Physics, 2003, 93, 10131-10133.	1.1	11
110	Microcavity effect on the electron-hole relative motion in semiconductor quantum wells. Physical Review B, 2003, 68, .	1.1	24
111	Period-doubling and Hopf bifurcations in far-infrared driven quantum well intersubband transitions. Physical Review B, 2003, 68, .	1.1	3
112	Time-domain simulation of quantum spin. Journal of Applied Physics, 2003, 94, 6518-6524.	1.1	11
113	Terahertz electrooptic modulation of a single biased GaAs quantum well. , 2003, , .		0
114	Calculus of sea-displacement operators. Physical Review B, 2002, 65, .	1.1	5
115	Nonlinear dynamics in far-infrared driven quantum-well intersubband transitions. Physical Review B, 2002, 66, .	1.1	31
116	Determination of the eigenfunctions of arbitrary nanostructures using time domain simulation. Journal of Applied Physics, 2002, 91, 3219-3226.	1.1	43
117	Mutual transparency of coherent laser beams through a terahertz-field-driven quantum well. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 1905.	0.9	7
118	Terahertz/optical mixing in symmetric semiconductor quantum wells embedded in optical microcavities. Journal of Lightwave Technology, 2002, 20, 1983-1988.	2.7	1
119	Numerical calculation of the terahertz field-induced changes in the optical absorption in quantum wells. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 457-463.	1.9	21
120	Nonlinear terahertz properties of n-type quantum-well heterostructures. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 464-473.	1.9	5
121	Exciton dephasing and absorption line shape in semiconductor quantum dots. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 1009-1014.	1.9	22
122	Mutual Optical Transparency through Quantum Wells in Strong Terahertz Fields. Physica Status Solidi (B): Basic Research, 2002, 234, 147-154.	0.7	0
123	Time-domain simulation of two electrons in a quantum dot. Journal of Applied Physics, 2001, 89, 3841-3846.	1.1	42
124	Simulation of spatiotemporal terahertz pulse shaping in 3-D using conductive apertures of finite thickness. IEEE Journal of Quantum Electronics, 2001, 37, 1226-1231.	1.0	4
125	Enhanced optical/THz frequency mixing in a biased quantum well. Solid State Communications, 2001, 120, 123-127.	0.9	8
126	Spatially resolved picosecond luminescence studies of carrier sweep-out photoconductive switches. , 2001, , .		0

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127	Optical absorption of THz-field-driven and dc-biased quantum wells. <i>Physical Review B</i> , 2001, 64, .	1.1	27
128	Excitons in Strong Terahertz Fields: Optical Properties and Wavepacket Dynamics. <i>Physica Status Solidi (B): Basic Research</i> , 2000, 221, 253-259.	0.7	1
129	Picosecond dynamics of terahertz-sideband generation in far-infrared illuminated quantum wells. <i>Applied Physics Letters</i> , 2000, 76, 3176-3178.	1.5	18
130	Terahertz Sideband Generation and Coherent Control in Semiconductor Microcavities. <i>Physical Review Letters</i> , 1999, 82, 3172-3175.	2.9	23
131	Semiclassical theory of terahertz multiple-harmonic generation in semiconductor superlattices. <i>Applied Physics Letters</i> , 1999, 75, 3536-3538.	1.5	35
132	Ultrafast modulation of semiconductor lasers through a terahertz field. <i>Applied Physics Letters</i> , 1999, 75, 442-444.	1.5	9
133	Excitonic-state trapping and quasiadiabatic population transfer in a two-band semiconductor. <i>Physical Review B</i> , 1999, 60, 15523-15526.	1.1	11
134	Terahertz pulse-induced switching of a quantum-well optical amplifier. <i>Applied Physics Letters</i> , 1998, 73, 3872-3874.	1.5	1
135	Generation of 10-THz transients from a subpicosecond optical pulse and a 1-THz field in quantum wells. <i>Applied Physics Letters</i> , 1997, 70, 1189-1191.	1.5	13
136	Constraints on coherent control of quantum-well excitons for high-speed all-optical switching. <i>IEEE Journal of Quantum Electronics</i> , 1997, 33, 404-407.	1.0	15
137	Coherent control of terahertz generation in a DC-biased semiconductor microcavity. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1996, 2, 720-723.	1.9	10
138	Coherent control of quantum-well excitons in a resonant semiconductor microcavity for high-speed all-optical switching. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1996, 2, 401-409.	1.9	15
139	Coherent exciton-photon dynamics in single, double, and quintuple quantum wells. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1995, 17, 1769-1774.	0.4	2
140	Coherent transport of excitons in quantum-dot chains: role of retardation. <i>Optics Letters</i> , 1995, 20, 901.	1.7	38
141	Radiative lifetimes of excitons in quantum wells: Localization and phase-coherence effects. <i>Physical Review B</i> , 1993, 47, 3832-3841.	1.1	305
142	Quantum-wire excitons: Polaritons and exchange effects. <i>Physical Review B</i> , 1993, 48, 2535-2542.	1.1	22
143	Long intrinsic radiative lifetimes of excitons in quantum wires. <i>Physical Review Letters</i> , 1992, 69, 3393-3396.	2.9	174
144	Anisotropic electron-hole wavepackets in quantum wells for multiple-harmonic-generation in the terahertz regime. , 0, , .		0

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145	Two color picosecond time resolved PL studies of anti-Stokes PL in GaAs/AlGaAs asymmetric double quantum wells. , 0, , .		0
146	Interaction of THz transients and ultrashort optical pulses in quantum wells: anisotropic wavepackets and optical switches. , 0, , .		0
147	Time-domain simulation of quantum nanostructures. , 0, , .		1
148	Optical properties of quantum wells driven by a terahertz electric field. , 0, , .		0
149	Terahertz/optical properties of semiconductor quantum wells. , 0, , .		0
150	Terahertz nonlinearities in semiconductor quantum wells. , 0, , .		0
151	New Approaches in Biochemical Sensing using Photonic Crystals in the Terahertz Region. , 0, , .		3
152	Biochemical sensing application of photonic crystal based devices in the far-infrared regime. , 0, , .		0
153	Two color picosecond time resolved PL studies of anti-Stokes PL in GaAs/AlGaAs asymmetric double quantum wells. , 0, , .		0